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BULLETIN

OF THE OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE. VOLUME FOUR, NUMBER TWO. . . . .

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ANNUAL CATALOGUE--1905-06

WITH ANNOUNCEMENTS FOR 1906-07

STILLWATER, OKLAHOMA
JUNE 1, 1906

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Oklahoma Agricultural
and Mechanical College

Annual Catalogue, 1905-6

With Announcements for 1906-7

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THE COLLEGE PRESS

1—MORRILL HALL 2—CENTRAL BUILDING 3—CHEMISTRY BUILDING 4—LIBRARY HALL 5—ENGINEERING BUILDING
6—COLLEGE BARN 7—NEW SHOP AND GYMNASIUM BUILDING 8—GREENHOUSE AND DAIRY BUILDING

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College Calendar, 1906-07

Fall Term begins Tuesday, September 11, 1906; closes Thursday, December 20, 1906.

Winter Term begins Thursday, January 3, 1907; closes Friday, March 15, 1907.

Spring Term begins Tuesday, March 19, 1907; closes Wednesday, June 5, 1907.

School of Agriculture and Domestic Economy opens Tuesday, October 16, 1906; closes Friday, March 15, 1907, with Christmas recess as noted above.

Commencement Day, June 5, 1907.

Tuesday and Wednesday, September 11 and 12, 1906, will be devoted to receiving and classifying new students, and also, with Thursday, September 13, to the registration of students, old and new.

Board of Regents

GOVERNOR FRANK FRANTZ, *ex officio* ..... Guthrie
HON. FRANK J. WIKOFF, President ..... Stillwater
HON. THOMAS J. HARTMAN, Treasurer ..... Deer Creek
HON. H. C. R. BRODBOLL ..... Ponca City
HON. H. G. BEARD* ..... Shawnee
HON. W. H. MERTEN ..... Guthrie

Experiment Station Staff

THE PRESIDENT OF THE COLLEGE

JOHN FIELDS, B. S. ..... Director
L. L. LEWIS, M. S., D. V. M. ..... Veterinarian
F. C. BURTIS, M. S. ..... Agriculturist
O. M. MORRIS, B. S. ..... Horticulturist
A. G. FORD, B. S. ..... Chemist
J. F. NICHOLSON, M. S. ..... Botanist and Entomologist
L. A. MOORHOUSE, M. S. ..... Agronomist
M. J. OTEY, B. S. ..... Clerk
W. L. ENGLISH, B. S.† ..... Assistant in Animal Husbandry
C. E. QUINN, A. B.‡ ..... Assistant in Agronomy
W. R. WRIGHT, B. S. ..... Assistant in Bacteriology
E. H. RILEY, B. Agr. ..... Assistant in Agriculture

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*Resigned March 7, 1906; succeeded by Hon. A. T. Kruse, Geary.
†Resigned May 1, 1606; succeeded by J. S. Malone, B. S.
‡Resigned April 1, 1906; succeeded by W. L. Burlison, B. S.

Faculty

ANGELO C. SCOTT, M. A., L. L. M.
President, English Language and Literature.

GEO. L. HOLTER, B. S.
Professor of Chemistry and Metallurgy.

LOWERY L. LEWIS, M. S., D. V. M.
Professor of Zoology and Veterinary Science.

JOHN FIELDS, B. S.
Director of the Experiment Station; Business Agent of the College.

RICHARD E. CHANDLER, M. M. E.
Professor of Mechanical and Mining Engineering, and Physics.

JAMES W. MEANS
Professor of Mathematics and Astronomy.

FRANCIS C. BURTIS, M. S.
Professor of Animal Husbandry, and Dairying.

ROBERT H. TUCKER, M. A.
Professor of German and Latin; Associate in English; Dean of Science and Literature Course.

OSCAR M. MORRIS, B. S.
Professor of Horticulture.

SARAH WINDLE LANDES
Professor of Domestic Economy.

EDWARD H. RILEY, B. Agr.
Principal of School of Agriculture and Domestic Economy.

JOHN F. NICHOLSON, M. S.
Instructor in Botany and Entomology.
(In charge of Department.)

LEWIS C. GRAY, M. A.
Instructor in History and Political Economy.
(In charge of Department.)

AUGUSTUS G. FORD, B. S.
Station Chemist and Instructor in Agricultural Chemistry.

JAMES F. LAWRENCE, A. B.
Instructor in Mathematics.

WALTER E. ROWE, B. S., C. E.
Instructor in Civil Engineering.

*LEWELLYN A. MOORHOUSE, B. S. A.
Assistant in Soils and Crops.

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*Absent on leave. Elected in March, 1906, Professor of Agronomy.

ARLINGTON P. LITTLE, M. S., E. E.
Assistant in Electrical Engineering.

ETHEL V. WALKER, B. S.
Assistant in English and Latin.

JESSIE E. MORROW, B. S.
Assistant in Domestic Economy.

CARL H. TOURGEE, B. S. A.
Assistant in Dairying.

†WILLIAM L. ENGLISH, B. S.
Assistant in Animal Husbandry.

‡CLARENCE E. QUINN, A. B.
Assistant in Soils and Crops.

WINFRED R. WRIGHT, B. S.
Assistant in Bacteriology.

JAMES H. FELGAR, A. B., B. S.
Assistant in Mechanical Engineering.

LEROY J. BARTON
Assistant Principal of School of Agriculture and Domestic Economy.

JOHN I. HASTINGS
Assistant in Shop Work.

CHESTER G. LINN
Principal of Business School and Registrar.

GEORGE B. GELDER
Superintendent of Printing Department, and Instructor in Printing.

CORA MILTIMORE, B. S.
Librarian.

R. REX SHIVELY, B. S.
Assistant in Chemistry Laboratories.

MONROE J. OTEY, B. S.
Clerk.

†Resigned May 1, 1906; succeeded by J. S. Malone, B. S.
‡Resigned April 1, 1906; succeeded by W. L. Burlison, B. S.

Oklahoma Agricultural and Mechanical College

Founding and History

An act of congress, approved July 2, 1862, gave to each state which accepted its provisions within two years 30,000 acres of goverment land for each one of its representatives in congress, the proceeds to be applied to the endowment and maintenance of the agricultural, or as Senator Morrill, the author of the act, preferred to call them, the "national" colleges.

A subsequent act, approved August 10, 1890, extended the endowment of these institutions by an appropriation of $15,000 a year, increasing each year by the sum of $1,000 until the annual amount should be $25,000. This limit was therefore reached in 1900.

On March 7, 1887, an act of congress was approved, appropriating annually to colleges thus established $15,000, for the maintenance of experiment stations "to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science".

This institution receives the benefit of the last two acts of congress only. By an act of the legislative assembly of Oklahoma, which took effect December 25, 1890, the provisions of these acts were assented to, and the College and Experiment Station located at Stillwater, in Payne County. The institution opened in the fall of 1891.

Scope of Work

It has been said above that this institution does not receive the benefit of the act of 1862. In order, however, to understand clearly the scope of work contemplated in these institutions the language of both acts should be quoted. The act of 1862 makes its grant for "the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding the other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, ... in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life". The appropriation under the act of 1890 is to be applied "only to instruction in agriculture, the mechanic arts, and the English language, and the

various branches of mathematical, physical, natural, and economic science, with special reference to their application in the industries of life, and to the facilities for such instrction.

From these two expressions of the legislative purpose it will be seen that the popular impression that the courses of study in these institutions are narrowly confined within the limits marked by the two words "agricultural" and "mechanical" is erroneous. While special facilities are provided, and special instruction is given, in agriculture and its branches, and in the mechanic arts, it is quite within the province of this institution to give specialized training in biology, in chemisty, in political science, in domestic economy, in commercial lines, and in the English language and literature. Even this liberal limitation may be extended within reasonable bounds—determined in accordance with the general nature of the institution—by the territory, insofar as it wishes to pay for the additional instruction. In a word the law contemplates the providing, through these institutions, of a "liberal and practical" education. It does not lose sight of the inspiration of the higher learning, but it has particularly in view the equipping of the student for efficiency in the activities of life.

The several courses of instruction, as set out in subsequent pages, will be seen to be arranged upon this conception of the scope of our work.

Resources

Morrill Fund The Oklahoma Agricultural and Mechanical College receives from the Government every year the sum of $22,500. This is the $25,000 "Morrill Fund" above referred to, less $2,500 set apart from it by the territorial legislature for the benefit of the Agricultural and Normal University at Langston. It is to be expended for instruction and appliances only, the territory of Oklahoma providing buildings, repairs, etc,

Hatch Fund The Agricultural Experiment Station, which is a department of the college, receives from the United States Government an annual appropriation of $15,000, to be used solely for experimentation and the publication of results. This is known as the "Hatch Fund."

Territorial Tax Levy The territorial law provides for a sufficient levy on the taxable property of the territory for the benefit of the college to realize $17,500 per year.

Land Lease Money The law also sets apart one-seventh of the income derived from the rental of the lands granted to the territory for the benefit of the institutions of higher learning. This amounts to about $9,000 a year.

Vaccine Fund A law passed by the Legislative Assembly of 1905 provides for an annual appropriation of $2,500 for the manufacture and free distribution within the territory of vaccine by the Agricultural Experiment Station.

Other Sources There are other slight sources of income, not necessary to detail here, which raise the total annual income of the college and station to about $70,000; but, as above stated, $15,000 of this amount is applicable only to expenses of experimentation, and not available for purposes of instruction.

Equipment

Farm and Grounds The campus, farm, and experiment station grounds embrace a tract of 1000 acres. This great increase in the land owned by the college for farm and experiment station purposes is due to an act of Congress approved February 8, 1905, donating a section of school land adjoining the old college farm on the west to the institution. The land now constituting the college farm represents all character of Oklahoma soils in ample measure, from the choicest bottom land to inferior upland, and renders possible experimentation in agricultural production in Oklahoma along all lines and on a liberal scale.

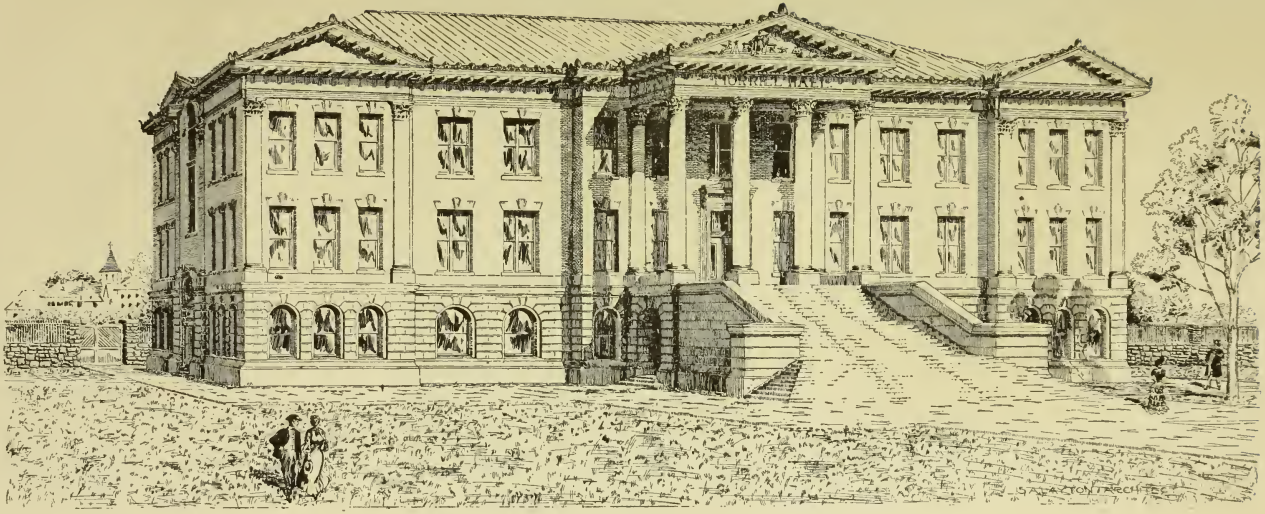
Buildings In addition to Morrill Hall, described in the following paragraph, which is now under construction, and which will hereafter be the principal building of the college, there are six buildings occupied for purposes of instruction: Library Hall, used, in addition to the accommodation of the library and reading rooms, for the departments of English, Latin and German, History and Political Economy, Zoology and Veterinary Science, Domestic Economy, Botany and Entomology, and the general auditorium—with lecture rooms, toilet rooms, etc. in the basement; Central building, used for the administrative offices, and for instruction in English, mathematics, business courses, etc.; the Chemistry building, used for instruction in chemistry, and for the offices and the operations in chemistry of the Experiment Station; the Engineering building, used for the offices, lecture rooms, drawing rooms, and reading room of the Department of Engineering, with adjoining buildings containing the shops and laboratories of the department; the shop building, erected during the present year, containing the class room, drawing rooms, and office of the department of civil engineering, a testing laboratory, and a foundry; and the dairy building, used for instruction and practical operations in dairying. In addition to these certain rooms in the college barn are fitted for instruction in stock-judging, dairying, etc.

Morrill Hall Morrill Hall, so named by the act of the legislative assembly providing for its construction in honor of Senator Justin S. Morrill, is now being erected and will be ready for occupancy in the fall of 1906. The cost, complete with heating plant, which is being installed by the engineering department of the college, will be $75,000. The illustration of this building shows what the general appearance will be when it is finished. There will be three full stories, the first faced with white Indiana limestone and the others with red pressed brick of first quality. All of the partitions, with five exceptions, are brick walls extending to the attic. To insure the utmost practicable protection against fire the building is of mill construction throughout. It will contain quarters for the administrative and business offices of the college and station, and suitable offices, lecture rooms, and laboratories for the departments of animal husbandry, agronomy, horticulture, and agricultural chemistry. There will be fire proof vaults on the first and second floors. The general dimensions of the building are 76 by 166 feet.

Library The college has a well selected library of about 12,000 volumes, besides some thirty thousand unbound publications. The books are kept in fire-proof stack rooms and a commodious reading room is provided immediately adjoining. Students are permitted under proper restrictions to take books to their rooms. The best reference books and the leading periodical publications are at the disposal of students.

Scientific Appliances In chemistry, physics, mineralogy, botany, zoology, entomology, physiology, agriculture, horticulture, and veterinary science the college is equipped with the latest and best appliances and apparatus, consisting of collections, models, charts, microscopes, balances, etc., representing an outlay by the government of approximately $90,000.

Engineering Department The amount of space available for practical work in this department has been almost doubled by the completion of the new shop building referred to in a previous paragraph. The building equipment now consists of the engineering building, containing lecture rooms, drawing rooms, offices, and bath rooms; the old shop building, containing, the mechanical, electrical, and wood-working laboratories, the printing office, and the boiler house, containing the central heat and power plant; and the new shop building, containing the class room, drawing rooms, and office of the department of civil engineering, a testing laboratory, a large blacksmith shop and a foundry. The equipment of the machine shop includes lathes, shaper, milling machine, planer, a universal grinding machine, drill press, and an extensive assortment of small tools. The wood working shop is supplied with a circular saw, band saw, wood turning lathes, a pattern-maker's



MORRILL HALL—FROM PEN DRAWING
In course of construction—to be occupied October 1, 1906

NEW SHOP AND GYMNASIUM BUILDING

lathe, and work benches with complete sets of carpenter tools. The foundry is supplied with an 18-inch cupola, core oven, sand sifter, and foundry benches and tools. The air blast is furnished by an electrically driven fan. In the electrical engineering laboratory the machinery has been selected and arranged in such a manner as to afford students the greatest facility for acquiring a thorough knowledge of different types of electrical machinery and their management. Especial attention has been devoted to alternating polyphase machinery—justified, it is believed, by the rapid development of this branch of engineering. Power is furnished by a 40-kilowatt and a 30-kilowatt dynamo directly connected to 10 x 10 automatic engines. The other electrical machines, indirect and alternating current dynamos and motors, static and phase-changing transformers, and synchronous converters, are all of the latest designs. The department is well supplied with necessary apparatus, including voltmeters, ammeters, and wattmeters of wide range, as well as galvanometers, and other instruments of greater precision. There is also a good selection of physical apparatus for purposes of demonstation and instruction.

Department of Chemistry This department is located in the chemistry building, occupying the basement, a lecture room, quantitative laboratory, and offices on the first floor, the entire second floor, and the attic—the remainder of the building being occupied by the experiment station. The lecture room seats comfortably seventy-five students, besides containing desks and extensive equipment for demonstration purposes. Quantitative, qualitative, and private laboratories and sample rooms occupy the second and third floors and one room on the first floor. A special agricultural laboratory is fitted up for senior students in agricultural chemistry. The laboratories are fitted with work desks designed to meet the demands of the student. Each student has before him two gas cocks, two water cocks, and a trough of running water, and thus need never leave his desk unless it be for a special reagent or for work at the hydrogen-sulfid hood. There is located in the basement of the building a 150-light Tirrill equalizing gas machine, which furnishes light and laboratory heat of the finest quality. The department is equipped with the best of modern apparatus, glassware, and chemicals. This large supply of working material greatly facilitates independent laboratory work. In more advanced work the student is supplied with a complement of burettes, pipettes, graduated flasks, desiccators, Gooch crucibles, etc. It is the experience of instructors in teaching quantitative analysis that the best results are obtained by having not more than three, preferably two, students for each analytical balance. In recognition of this, the department is equipped with two E. & A., one Rueprecht, one Staudinger, and seven Sartorius analytical balances. There are in addition to these one E. & A. assay balance, one gas analysis

balance, and three other balances for rough weighing. In sugar and sugar beet analysis, aside from the ordinary methods used the student is taught the use of the polariscope and has at his disposal one Schmidt and Haensch polariscope, equipped with a double set of observation tubes. In the study of mineralogy there is a well chosen collection of several hundred specimens, supplemented by about 300 pounds of working material. Aside from these minerals there are 75 glass and 60 wooden crystal models, and 21 models of precious stones.

Botany and Entomology This department occupies the second floor of the west wing of Library Hall. These rooms are used as laboratories, dark room, store room, lecture room, and office, the lecture room being in direct communication with the biological museum. The equipment of the laboratories includes twenty-four compound microscopes of recent manufacture (five of Zeiss and nineteen of Bausch & Lomb make); a number of compound microscopes designed for special purposes; sixteen simple microscopes, and a large assortment of lenses; a Zimmerman-Minot rotary microtome, a Bausch and Lomb sliding microtome, and several hand microtomes; camera lucida; photographic and photomicrographic cameras, and accessory apparatus; several hundred microscopic preparations of simple plants and plant tissues; a large collection of preserved plant tissues and pathological specimens for practical study; a fine assortment of chemicals, reagents, and stains; an ample supply of glassware; and a variety of special apparatus for the study of plant physiology. The museum and lecture room contain a large herbarium which includes authentic collections of fungi, algæ, lichens, and mosses; the botanical and entomological collections of the experiment station, which are available for reference; Auzoux models illustrating the anatomy of flowers and fruits; several Auzoux models showing the anatomy of insects; preparations showing the metamorphoses of different types of insects; a set of Kny botanical charts, showing the minute details of plant structure and reproduction; a set of Peter charts that show representative plants of many orders; and collections of woods, fibers, seeds, etc., and also of economic, medicinal, and agricultural plants. There are several collections of hardy herbs, shrubs, and trees planted on the college grounds, from which material may be obtained for the use of classes.

Zoology and Veterinary Science This department occupies quarters in Library Hall, consisting of laboratories for general biological work, and a lecture room. The apparatus for general biological work consists of twenty compound Zeiss and Lietz microscopes, with complete sets of eye pieces and objectives, micrometers and cameras, microtomes, thirty sets of dissecting instruments, and photomicrographic apparatus. The department is also well supplied with dissectible models of various types of animals, including an Auzoux model of the horse; with skele-

tons of most of the lower animals and of man; and with numerous prepared skins of birds and animals for purposes of demonstration and instruction. For the work in physiology there are models of the various organs of the body, wall charts, and skeletons, mounted and unmounted.

Department of Agriculture Instruction in this department is given in the basement of Central building and in the college barn. The latter is a two-story brick structure, 60 x 96 feet, which, in addition to providing storage space for hay and grain and stabling for live stock, contains a room for stock-judging. The feedlots and corrals have been rearranged in order that the different breeds of live stock may be safely and economically handled. The agricultural and horticultural departments receive great benefit from the experiment station which is located at the college. This branch of the institution has a large number of experiments continually under way, which constitute the most valuable object lessons to the students. The farm includes 1000 acres, three-fourths of which is devoted to agriculture. The experiment station uses all the fields for crop experiments, and the student sees the various crops under cultivation; and the study of crop production is further illustrated by a good collection of grasses and field crops exhibited in bundles and show bottles. The live stock equipment affords an excellent opportunity to study the improved breeds of stock. The pure bred stock represented is as follows: cattle, Shorthorns, Herefords, Aberdeen Angus, and Red Polls; swine, Poland Chinas, Berkshires, Duroc-Jerseys, and Chester Whites; sheep, Shropshires and Cotswolds; horses, Percheron. In addition to the pure breeds of the various classes of stock, grades of the different breeds are kept for comparison. Breeds not represented on the farm are studied from engravings conveniently arranged on wall charts and in albums. The large number of feeding experiments carried on at all times by the experiment station affords the students ample opportunity to apply the principles laid down in the class room. Samples of all standard farm machinery are kept in a commodious implement room where easy access can be had to them, and the student has the opportunity to see these in operation, many of them under draft tests. A farm dairy, fully equipped with hand separators, milk tests, cream vats, milk coolers, and other apparatus which aid in the production of high grade dairy products, is in operation.

Department of Horticulture This department is equipped with a complete line of garden seeders; tools for lawn work, spray pumps with fittings; eighteen complete sets of garden tools; complete models of all common varieties of apples, peaches, plums, pears, and cherries; charts showing the diseases of fruits and garden plants; an herbarium of cultivated plants showing most of the different plants cultivated in the United States; five complete sets of instruments used in plant breeding; five complete microscopes and accessories. In the way of practical

operations, this department is well situated, having at its command the extensive vineyards and orchards of the experiment station. The horticultural grounds include sixty acres with more than fifty thousand trees and vines. For instruction in forestry a plantation of forty thousand trees is available, both for observation and for instruction in propagation, pruning, and transplanting.

Department of Domestic Economy This department is located in the rooms on the first floor of the west wing of Library Hall. The department includes a kitchen laboratory, class dining room, sewing room, office, and store room. The kitchen laboratory has equipment sufficient to enable fourteen students to work at one time, and consists of fourteen conveniently arranged desks, furnished with all the dishes and cooking utensils necessary for individual work; cases for the large utensils and supplies and illustrative material; one gas range, one kerosene range, and three small gas burners on the work desks; charts and samples to aid in teaching and studying the composition and preparation of the different foods. The equipment of the class dining room consists of a full set of dining room furniture and dishes used by the classes studying dining room management and serving. The sewing room is equipped with one large cutting table and six sewing tables, all made with drawers in which to keep garments and material; six sewing machines of different makes; a large mirror for use in dress fitting; illustrative material, such as cotton, silk, and flax fibers, needles, etc., and twenty-four sewing chairs.

Gymnasium The new gymnasium is a well lighted room 45 x 65 feet and is well equipped with all of the apparatus necessary for indoor work, with suitable bathing conveniences. The apparatus is all new and the various pieces are well suited for a great variety of exercises, such as are usually given in a course of gymnasium work. For class exercises in physical culture a large number of dumb bells, Indian clubs, and wands are provided. Every student in the college is required to take a reasonable amount of systematic physical culture, either in gymnasium or in outdoor exercise of suitable character. This requirement may be modified to some extent in the case of young men, who, in order to help meet expenses, are performing labor on the college farm or elsewhere.

Other Departments The departments of the English language and literature, of foreign languages, and of history and political economy are properly supplied with facilities for instruction, and are represented with special fullness in the library. The department of mathematics and civil engineering has extensive appliances for demonstration, instruction, surveying, and other practical work. The printing office is suitably equipped for instruction, which is its primary purpose. The

A CLASS IN COOKING

A DINING ROOM SCENE

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

regular college publication, *The College Paper*, is issued by this department, under student management, and the general job work of the college, including the annual catalogue, is done by it. The business department is equipped with nine typewriters, one Elliott & Hatch book typewriter, and other necessary appliances.

Agricultural Experiment Station

This department of the college is maintained for the purpose of conducting experiments relating to the development of our agricultural interests and the widening of our knowledge on subjects in any way connected with farm life. Experiments in crop production, stock raising and feeding, and fruit and vegetable growing are conducted on a 1000 acre farm belonging to the college. A tract of 640 acres described on a previous page, was granted by act of Congress, in February, 1905. In the laboratories animal and plant diseases, insects, the composition of feeding stuffs, and kindred subjects are investigated by trained specialists, each of whom has devoted many years of study and preparation to the particular class of work committed to him.

While the station takes no direct part in instruction, its work affords a valuable source of illustration and stimulus to students in every branch of science. With but two exceptions, members of the station staff are also engaged in instruction in the college. Students showing special aptness are frequently employed in the work of the station and thus gain valuable experience and are enabled to earn something towards paying their expenses.

The chief purpose of the station is to discover new truths and new applications of old ones. It properly leaves to the college the work of instruction in systematized knowledge.

Bulletins reporting results of completed investigations are issued by the station and sent free to all who desire them.

Courses of Instruction

Attention is directed to material additions to the courses of instruction and to some slight alterations in the courses hitherto established. To meet the just demand for a more general and less sharply specialized course, both for men and women, the "Science and Literature Course" has been established, and particular attention is called to the outline of this course which follows. The two years' School of Agriculture and Domestic Economy, in which incidental instruction in the common branches is given, is continued. An analysis of this course is given on pages 21–22. All regular collegiate courses cover a period of five years, embracing the Sub-Freshman, Freshman, Sophomore, Jun-

ior, and Senior classes, and leading to the degree of Bachelor of Science. The courses are as follows:

I.—General Science Course.
II.—Agricultural Course.
III.—Engineering Courses—a. Mechanical.
b. Electrical.
c. Civil.
IV.—Science and Literature Course.

Admission to Sub-Freshman Class

The sub-freshman class has been established to secure, under competent instruction, a higher degree of efficiency in the studies which underlie the more advanced collegiate work, particularly in English and mathematics. Applicants for this class may be admitted without examination on satisfactory records from the eighth grade of city schools, or on diplomas from the common schools. Not holding these, they must pass a satisfactory examination in reading, spelling, penmanship, geography, United States history, grammer, and arithmetic. Applicants for this class must not be less than fourteen years of age.

Admission to Freshman Class and to Advanced Standing

Appliciants for admission to the Freshman class must pass an examination in the studies above mentioned, and in higher arithmetic, algebra to quadratic equations, physiology, and physical geography. Students from high schools who have satisfactorily completed the tenth grade may be admitted without examination. Graduates of approved high schools may be admitted to the sophomore class, on their diplomas, without examination.

General Science Course

This course is arranged to the end first, of offering a good general and practical education along scientific and literary lines; second, of giving major work in specific natural sciences, together with an approved amount of instruction in mathematics, literature, language, history, political economy, and other general subjects.

The Course in Detail

[The figures indicate the number of recitation hours per week; figures in parentheses indicate hours of practical work per week.]

Sub-freshman Year

FALL TERM	WINTER TERM	SPRING TERM
Higher Arithmetic.....5	Algebra.....5	Algebra.....5
English.....5	English.....5	English.....5
Physical Geography.....4	Physiology.....4	Physiology.....4
Bookkeeping.....5	American History.....5	Botany.....3(2)
Spelling and Writing.....(2)	Spelling and Etymology..(2)	Spelling and Etymology..(4)

Freshman Year

Rhetoric.....3	Rhetoric.....3	English.....3
Latin.....4	Algebra.....4	Algebra—men.....3
Algebra.....5	Geometry.....5	or Dom. Economy—women 3
Physics.....4	General History.....3	General History.....5
Sewing—women.....(2)	Latin.....3	Latin.....5
Cooking—Women.....(2)	Dom. Economy—women....(4)	Geometry.....4
Drawing.....(4)	Geometrical Drawing—men (4)	
Horticulture.....2		
or Wood Work (men)..(4)		

Sophomore Year

English.....2	English.....2	English.....3
German.....4	German.....4	German.....3
Geometry.....4	Trigonometry.....3	Inorganic Chemistry...2 (4)
Inorganic Chemistry....3(4)	Inorganic Chemistry.....3 (4)	Botany.....5
Zoology.....3 (4)	Social and Industrial History.....5	Trigonometry and Surveying.....3 (4)

Junior Year

Literature.....2	Literature.....2	Literature.....3
Physics.....4 (2)	German.....4	German.....3
German.....3	Public Speaking.....(2)	Entomology or Physical Chemistry 3 (4)
Elective*	Physics.....3	Elective*
Botany.....3 (4)	Elective*	Cellular Biology.....3 (4)
Histology.....3 (4)	Advanced Physiology.....3 (4)	Botany.....3 (4)
Theoretical Chemistry.3 (4)	Analytical Geometry and Calculus.....5	Analytical Geometry and Calculus.....5
Analytical Geometry and Calculus.....5	Organic Chemistry.....3 (4)	Organic Chemistry.....3 (4)
Domestic Economy.....3 (4)	Domestic Economy.....3 (4)	Electricity.....5
	Botany.....3 (4)	Domestic Economy.....3 (4)

Senior Year

Literature.....3	Literature.....4	Bacteriology.....4
or Agri. Chemistry..2 (2)	or Agri. Chemistry..2 (2)	Business Forms.....3
Geology.....5	Bacteriology.....2 (2)	Thesis.....8
German.....4	German.....4	Elective*
Elective*	Elective*	Astronomy.....4
Mineralogy.....4	Forestry.....5	or Agri. Chemistry 2(2)
Law.....4	Metallurgy.....3(2)	Industrial Chemistry...3 (4)
Botany.....2 (4)	Calculus.....4	or Botany.....3 (4)
Embryology.....2 (4)	Botany.....2 (4)	
Chemistry.....1 (6)	Industrial Chemistry.....3 (4)	
Calculus.....4		

*The student is required to elect a sufficient number of subjects to make a total of twenty hours per week, two hours indicated in parentheses to be estimated as one.

Engineering Courses

These courses are intended to prepare young men for positions of usefulness and responsibility in the mechanical, civil, and electrical engineering professions. The early part of the course is devoted to a thorough grounding in English, mathematics, and physics, mechanical drawing and shop work also being given. The last two years are devoted to the higher mathematics and to the more technical engineering studies, including, in mechanical engineering, machine designing, steam machinery, strength of materials, etc.; in electrical engineering, electrical measurements, direct and alternating current dynamos, motors, transformers, systems of power distribution, electric lighting, electric railways, etc.; and in civil engineering, designs of framed structures, roads, streets, and pavements, stresses in framed structures, masonry construction, and hydraulic, irrigation, sanitary, and railroad engineering.

Mechanical and Electrical Engineering Course in Detail

Sub-Freshman Year

The Same as in General Science Course

Freshman Year

FALL TERM	WINTER TERM	SPRING TERM
Rhetoric.....3	Rhetoric.....3	English.....3
Algebra.....5	Algebra.....4	Algebra.....3
Physics 4	Geometry.....5	General History.....5
Mechanics.....4	General History.....3	Geometry.....4
Drawing.....(4)	Mechanics.....3	Foundry and Pattern
Wood Work.....(4)	Woodwork.....(4)	Making.....(10)

Sophomore Year

English.....2	English.....2	English.....3
Geometry 4	Trigonometry.....4	Inorganic Chemistry....2 (4)
Inorganic Chemistry....3 (4)	Inorganic Chemistry.....3 (4)	Descriptive Geometry..5 (2)
Algebra.....3	Descriptive Geometry....5 (2)	Trigonometry and
Mechanics.....3	Mechanical Drawing.....(6)	Surveying.....3 (4)
Mechanical Drawing.....(6)		Mechanical Drawing.....(4)

Junior Year

Physics.....4 (2)	Physics.....3	Electricity 5
Analytical Geometry	Analytical Geometry	Analytical Geometry
and Calculus.....5	and Calculus.....5	and Calculus.....5
Kinematics.....3	Applied Mechanics.....3	Applied Mechanics.....4
Steam Boilers.....3	Public Speaking .....(2)	Indicators.....2
Blacksmith Shop.....(6)	Valve Gears.....3	Machine Shop.....(8)
Mechanical Drawing.....(2)	Machine Shop.....(8)	
	Mechancial Drawing.....(2)	

Senior Year

Calculus.....4	Machine Design.....3(6)	Business Forms.....3
Law.....4	Electrical Engineering....4 (4)	Thermodynamics or De-
Machine Design.....4 (4)	*Stresses in Framed Struct-	sign of Framed Struct-
Electrical Engineering..4 (6)	ures, Electric Lighting	ures or Telegraph and
	and Power, or Heating	Telephone Engineering..5
	and Ventilation.....4	Machine Design.....4
		Eletrical Engineering...3 (2)
		Thesis .....(8)

*The student will take two of the subjects in the bracket.

Civil Engineering Course in Detail

Sub-Freshman Year

The Same as in General Science Course.

Freshman Year

FALL TERM	WINTER TERM	SPRING TERM
Rhetoric 3	Rhetoric 3	English.....3
Algebra.....5	Algebra.....4	Algebra.....3
Physics 4	Geometry 5	General History.....5
Mechanics.....4	General History.....3	Geometry 4
Drawing.....(4)	Mechanics.....3	Foundry and Pattern
Wood Work.....(4)	Wood Work.....(4)	Making.....(10)

Sophomore Year

English 2	English.....2	English.....3
Geometry 4	Trigonometry.....4	Inorganic Chemistry....2 (4)
Inorganic Chemistry....3 (4)	Inorganic Chemistry.....3 (4)	Descriptive Geometry..5 (2)
Algebra.....3	Descriptive Geometry....5 (2)	Mechanical Drawing.....(4)
Mechanics.....3	Mechanical Drawing .....(6)	Trigonometry and
Mechanical Drawing.....(6)		Surveying.....3 (4)

Junior Year

Physics.....4 (2)	Physics 3	Eletricity and Magnet-
Analytical Geometry	Analytical Geometry	ism.....4 (2)
and Calculus 5	and Calculus 5	Analytical Geometry
Advanced Mechanics 3	Advanced Mechanics.....3	and Calculus 5

Hydraulic Engineering....4
Blacksmith Shop.....(6)
Irrigation Engineering.....4
Machine Shop.....(8)
Public Speaking..... ..(2)
Advanced Mechanics.....4
Roads Streets and Pavements 2
Machine Shop.....(8)

Senior Year

Calculus 4
Machine Design.....4 (4)
Electrical Engineering..4 (4)
Sanitary Engineering.....2
Railroad Engineering.....2
Stresses in Framed Structures.....5
Analytical and Graphical Methods .....
Machine Design.....3 (6)
Electrical Engineering....4 (4)
Masonary Construction.....3
Design of Framed Structures..... 4
Thermodynamics 5
Electrical Engineering..3 (2)
Business Forms.....3
Thesis 8

Agricultural Course

This course is designed to afford scientific training and practical knowledge to young men who expect to follow agriculture as a life work, or to prepare themselves as instructors of others therein. A two years' course (twenty weeks in each year) is also offered, detailed announcement of which is made in another place. The short winter courses in agriculture and in dairying (ten weeks) will be given in connection with the School of Agriculture and Domestic Economy for the benefit of farmers who are not in a position to matriculate as regular students of the institution.

The Course in Detail

Sub-Freshman Year

The Same as in General Science Course.

Freshman Year

FALL TERM	WINTER TERM	SPRING TERM
Rhetoric.....3	Rhetoric.....3	English.....3
Algebra.....5	Algebra.....4	Algebra.....3
Physics. 4	Geometry..... 5	General History.....5
Stock-judging.....1 (6)	General History..... 3	Geometry..... 4
Drawing..... .....(4)	Horticulture 3	Breeds..... .. ..5 (2)
Horticulture.... 2	Woodwork or Geometrical Drawing.....(4)	

Sophomore Year

English..... 2	English..... 2	English.... 3
German..... 4	German.... 4	German.... 4
Geometry 4	Trigonometry.....4	Inorganic Chemistry.... 2(4)
Inorganic Chemistry....3 (4)	Inorganic Chemistry.....3 (4)	Trigonometry and Surveying..... 3 (4)
Zoology 3 (4)	Soils and Fertility 4 (2)	Botany.....5

Junior Year

Physics. 4 (2)	Physics..... 3	Entomology.....3 (4)
Botany 3 (4)	Farm Dairying.....3 (4)	Animal Breeding..... 4
Animal Nutrition.....3	Botany..... .....3 (4)	Crops 5 (2)
Stock Feeding 2	Advanced Physiology.....3 (4)	Cellular Biology.. .....3 (4)
Theoretical Chemistry..3 (4)	Public Speaking.....(2)	
	Pomology..... 1	

Senior Year

Agricultural Chemistry.2 (2)	Agricultural Chemistry..2 (2)	Stock Feeding.....3
Agricultural Physics 4 (4)	Bacteriology.....2 (4)	Business Forms.....3
Geology..... 5	Forestry..... 5	Bacteriology.....2 (4)
Law... 4	Farm Economics..... 2	Agricultural Chemistry.2 (2)
Embryology..... 4	Veterinary Medicine..... .3	Plant Breeding... .....1 (2)
	Evolution of Cultivated Plants..... 3	Thesis..... .....(10)

Science and Literature Course

This course is now offered for the first time. It is designed to meet the needs of students who desire to enter the professions of teaching, journalism, or law, or who wish a general collegiate education. It will be found equally well adapted to the requirements of young women who desire a thorough collegiate course, being stronger in languages, literature, history, etc., than the technical courses, and affording also an opportunity to specialize in the various lines of domestic economy. It is confidently believed that this will prove a most valuable "general purpose" course, and that it will effectively prepare the student for the duties of American life and citizenship and for the successful prosecution of any chosen career.

The Course in Detail

Sub-Freshman Year

The Same as in General Science Course.

Freshman Year

FALL TERM	WINTER TERM	SPRING TERM
Rhetoric 3	Rhetoric 3	English 3
Latin.....4	Algebra.....4	Algebra (men).....3
Algebra.....5	Geometry 5	or Domestic Economy (women).....3
Physics 4	General History. 3	General History..... 5
Cooking (women)..... (2)	Latin..... 3	Latin 5
Sewing (women).....(2)	Domestic Economy (women) (4)	Geometry 4
Drawing.....(4)	Geometrical Drawing(men) (4)	
Horticulture 2		
or Woodwork (men)....(4)		

Sophomore Year

English..... 2	English..... ..2	English.....3
German 4	German 4	German 4
Geometry 4	Trigonometry.....4	Inorganic Chemistry....2 (4)
Inorganic Chemistry....3 (4)	Inorganic Chemistry.....3 (4)	Botany..... 5
Latin.....5	Latin 5	Latin..... 4
or *Zoology.....5	or *Domestic Economy (women) 5	or *Domestic Economy (women) 4
		or Trigonometry and surveying.....3 (4)

*To be taken by young women who desire to specialize in domestic economy with a view to teaching the subject; others may continue Latin and take up domestic economy at the beginning of the Junior year.

Junior Year

Literature. 2	Literature..... 2	Literature.....2
Physics.... ....4 (2)	German 4	German 4
German 3	Public Speaking.... .....(2)	Public Speaking.....(2)
Elective*	Elective*	*Elective
English History.....5	Civics 3	Civics 3
Domestic Economy.....5	Domestic Economy.....3(4)	Psychology.....5
Theoretical Chemistry.3 (4)	Advanced Physiology... 3 (4)	Domestic Economy 3 (4)
Zoology (Soph)... .....3(4)	Analytical Geometry and	Analytical Geometry and
Analytical Geometry and	Calculus..... 5	Calculus 5
Calculus 5	‡Music 3	Botany..... ...3 (4)
Botany.... .....3 (4)	†Dairying..... .....3 (4)	‡Music 3
	Botany..... .....3 (4)	Entomology.....3 (4)

*The student is required to elect a sufficient number of subjects to make a total of twenty hours per week, two hours indicated in parentheses to be estimated as one.

†Required of students specializing in domestic economy.

‡Individual instruction at expense of student.

Senior Year

Literature.....3	Literature.....4	Literature.....4
Geology 5	*Elective	Thesis.....(8)
*Elective	American History.....4	*Elective
German 4	German 4	American History... 4
History of Western Europe.4	Sociology 4	German 4
Political Economy..... 4	Domestic Economy..... ... 4	Astronomy.....4
Law..... 4	Bacteriology.. 4	Domestic Economy.....4
Domestic Economy.....4	Forestry..... 5	Business Forms.....4
Calculus.....4	Household Science.....4	Bacteriology 4
Embryology.....4		
Household Science 4		

*The student is required to elect a sufficient number of subjects to make a total of twenty hours per week.

School of Agriculture and Domestic Economy—Two Years of Twenty Weeks Each

This course is arranged with the purpose of giving instruction in agriculture, certain practical lines of mechanics, and domestic economy, requiring less time than the full courses, but affording very valuable training—almost indispensable training, indeed, to young men who expect to stay on the farm, and young women who would know how to conduct a home. Such common school work as can be given without prejudice to the scientific and practical work is offered in addition. Applicants must be at least fifteen years of age, and fairly well advanced in the common branches. To meet the conditions of many young men and women in the country the course is arranged to begin about October 15, when the fall work on the farm ceases to be pressing, and to close about March 15, when the services of the student are likely to be again needed at home. The present year the course will begin October 16, 1906, and close March 15, 1907. Students who are reasonably proficient in the common school branches and students of mature years may take the agricultural, mechanical, and domestic economy work of both years in one, if they desire, and be excused from the other work of the course. For students thus choosing the work is indicated below under the heading, "One Year Course in Agriculture."

Particular attention is directed to a detailed account of the nature and extent of the work offered in the School of Agriculture and Domestic Economy on pages 43–47.

Following is the course in detail,—the figures indicating the number of recitation hours per week, figures in parentheses indicating hours of practical work per week:

First Year

FALL TERM

A. M.	P. M.
Arithmetic.....5	Drawing .....(2)
Geography.....4	Carpentry (men).....(4)
Spelling and Writing.....2	Cooking (women).....(2)
Botany and Entomology.....4	Sewing (women).....(4)
Cooking (women)..... ...2	Botany and Entomology.. .(4)
	*Engines and Boilers (men).(2)

WINTER TERM

Arithmetic. 4	Stock-judging, men .....(4)
English 4	Blacksmithing, men . .....(4)
Live Stock, men 3	Drawing.....(2)
Comparative Physiology....4	Cooking, women..... ....(2)
Cooking, women 2	Sewing, women .....(4)
	*Engines and Boilers, men (2)

*Offered on Mondays—Optional.

Second Year

FALL TERM

A. M.	P. M.
Arithmetic.....4	Gardening.....(2)
English 4	Dairying women (2) men....(4)
Civics 3	Farm Mechanics, men .....(2)
Horticulture and Floriculture 3	Cooking women.....(2)
Dairying..... 3	Sewing, women..... .....(2)
Poultry 2	*Engines and Boilers, men..(2)
Cooking, women 2	

WINTER TRRM

History 3	Veterinary Medicine, men .(2)
English 2	Grain-judging; men.....(2)
Soils and Crops.....4	Soils ....(2)
Stock Feeding and Manage-	Sewing, women..... .(4)
ment, men.....3	Cooking, women.....(2)
Chemistry 3	*Engines and boilers, men (2)
Veterinary, Medicine, men...1	
Farm Accounts..... 2	
Cooking, women.....2	

*Offered on Mondays—Optional.

One Year Course in Agriculture

FALL TERM—TEN WEEKS

A. M.	P. M.
Poultry 2	Gardening ....(2)
Horticulture and Floriculture 3	Dairying .... (4)
Dairying.....3	Carpentry .....(4)
Botany and Entomology.....4	Farm Mechanics..... .....(2)
	Botany and Entomology....(4)
	Drawing..... .....(2)
	*Engines and Boilers.....(2)

WINTER TERM—TEN WEEKS

Botany and Entomology.....2	Veterinary Medicine.....(2)
Soils and Crops.....4	Grainjudging..... .....(2)
Stockfeeding and Manage-	Botany and Entomology....(2)
ment 3	Drawing.....(2)
Chemistry..... 3	Blacksmithing..... (4)
Veterinary Medicine.....1	Stock-judging.....(4)
Farm Accounts.....2	Soils.... .... (2)
Live Stock.....3	*Engines and Boilers.....(2)
Dairying.....1 (4)	

*Offered on Mondays—Optional

Spring Term Course for Teachers in Nature Study, Agriculture, and the Common Branches

To meet the rapidly growing demand for the teaching of nature study and agriculture in the public, and particularly in the rural schools, this course in these branches, together with review work in the common school studies, has been established. The expert instructors and the extensive equipment of the college in these lines assure the utmost benefit that the student can receive in so short a time. The Burkett, Stevens, and Hill text, "Agriculture for Beginners", is used, and lectures are given on such subjects as Garden Plats for Schools,

Beautifying School Grounds, Bacteriology in the School, Hygienic Conditions of School Life, Oklahoma Soil Studies, Stock Feeding, Care and Management of Live Stock, Milk and its Products, Improvement of Farm Crops, etc. In the common branches advanced instruction is given in arithmetic, grammar, composition, geography, American history, physiology, civics, physics, and bookkeeping.

Graduation from School of Agriculture and Domestic Economy

As as incentive to students to enter this work which the college conceives to be so important, and as a thing valuable in itself, it has been determined to have graduation exercises hereafter from the School of Agriculture and Domestic Economy, and to award a certificate to those finishing the work in an acceptable manner under the rules of the college.

Short Winter Course in Agriculture and Dairying

For several years past a course under the above name has been given, beginning at the commencement of the winter term, about January 1, and lasting eight weeks. This course has been extended to ten weeks, and is identical with the winter term of the "One Year Course in Agriculture" (see outline above.) It includes the subjects of crops for Oklahoma, live stock, stock judging, stock feeding and management, veterinary medicine, dairying, soils, grain-judging and seed selection, blacksmithing, engines and boilers, chemistry, and botany and entomology.

Work in blacksmithing, steam engines and boilers, veterinary practice, and dairying, will be given in the afternoon, and will be thoroughly practical in nature.

The lectures will be supplemented by practical work in the dairy, barns, and shops, designed to fix and illustrate the methods and practices advised.

Short Course in Stockjudging and Seed Selection

A short course in stockjudging and seed selection lasting for one week will again be given at some time during January and February. The dates and program will be announced later.

Business Course

A complete business course is offered to students having the qualifications to enter the sub-freshman class. The course is as follows:

Fall Term: Bookkeeping, spelling and writing, commercial arithmetic, commercial law, English. Or, stenography and typewriting, spelling, English.

Winter Term: Advanced bookkeeping, banking and business correspondence, spelling and writing, commercial arithmetic, English. Or, Stenography and typewriting, spelling, English.

Spring Term: Bookkeeping, commercial arithmetic, English. Or, Stenography and typewriting (including manifolding, letter-press work, typewriter dictation), English.

Special Work

Students of reasonably mature years and adequate preparation are permitted to select special work under the advice of the faculty.

Departments of Instruction

Under this title a more extended account of the topics covered in the different departments will be given.

The English Language and Literature

The President
Professor Tucker
Miss Walker

The study of the English language and literature runs through the five years of the General Science and Science and Literature courses.

I. ENGLISH. This work extends through the sub-freshman year. It is designed to prepare the student for an appreciative study of rhetoric and composition, as taken up in the freshman year. It comprises; (1) A comprehensive review of English grammar. (2) The study of practical English, in connection with a suitable manual, with the especial object of checking up the ordinary errors and slovenliness of speech. (3) The reading of a nnmber of standard English classics.

2. ETYMOLOGY AND STRUCTURE. Sub-Freshman year, winter and spring terms. A study of word building, with special reference to the Latin and Saxon elements of the language.

3. RHETORIC. This subject occupies the first two terms of the freshman year. The principles of invention, the elements of style, the different forms of composition, and other matters belonging to elementary rhetoric are here taken up preparatory to the advanced study of the same subject the next year and to the writing of formal themes. In connection with this work careful and painstaking instruction is given in punctuation, in letter writing, and in the preparation of manuscript for the press, as well as in the art of expression, both oral and written.

4. ELEMENTARY THEME WORK. Freshman year, spring term. This course is intended to afford practical training in the art of composition. The principles of unity, coherence, and emphasis are studied in their relation to the whole composition, the paragraph, and the sentence, while especial attention is given to the choice of words and to the various forms of sentence structure. Themes, varying in length and difficulty, are required weekly, the subjects being narrative or expository, and usually within the student's experience. Daily practice in punctuation, paragraphing, and paragraph-writing.

5. AMERICAN LITERATURE. Sophomore class, fall and winter terms. The purpose of this course is to trace the history and development of American literature and to awaken in the student an intelligent and appreciative interest in the best American classics. It consists, therefore, of a general view of the history of American literature from

colonial times to the present day, together with an intensive study of some of the greater writers, including Irving, Bryant, Hawthorne, Poe, Longfellow, Lowell, and Emerson. Parallel reading and written exercises are required in connection with the class-room work.

6. Advanced Rhetoric and Theme Work. Sophomore class, spring term. The course in advanced rhetoric and theme work continues in a more ample and philosophical form the work of the spring term of the freshman year. It offers a brief study of the principal forms of discourse, but its chief aim is to afford constant practice in writing. The course begins with the writing of narratives, followed by newspaper writing, expository and argumentative writing, and so on to abstract themes.

7. Literature. The Junior year in this department is given to the study of English literature. While this year's work is historical, rather than philosophical or critical, yet the subject is presented by periods, the characteristtcs of which are carefully studied. Extended readings from representative authors are given, the comparative method being constantly kept in view. Written work is required in the discretion of the instructor, both as fixing the student's grasp of the subject, and as further illustrating the principles of rhetoric.

8. Literary Interpretation and Criticism—Masterpieces. The Senior year opens with a view of the philosophy of the development of our literature, and the principles of literary interpertation and criticism. This work is based upon approved texts, and is reinforced by lectures. The last half of the year is given to the study of masterpieces of the language in poetry and prose, including a critical reading of selected plays of Shakespeare. The course closes with a study of living writers.

Agriculture

Animal Husbandry and Dairying

Professor Burtis
Mr. English
Mr. Tourgee
Mr. Malone

Agromony

Professor Moorhouse
Mr. Burlison

The following analysis applies to students taking the specialized course in agriculture (see page 18). It indicates, also, however, the elective work in agriculture and horticulture which is offered in the other courses.

1. Stock-Judging. Freshman year, spring term. A thorough training in score card work. Study of animal form as in index of qualities; selection of animals to give the greatest excellence in beef, dairy, mutton, wool, and pork products, and in efficiency in labor. One class

period a week is devoted to the study of the principles of stock-judging, and three practicum periods a week are devoted to score card practice work at the barns, where the different animals are judged for the purposes for which they are raised.

2. Soils and Fertility. Sophomore year, spring term. Soils, origin, chemical and physical composition; classification; handling to obtain conditions best suited for plant growth; value of manure and fertilizers, their preservation and application.

3. Breeds of Live Stock. Sophomore year, spring term. The leading breeds of cattle, sheep, swine, horses, and poultry are studied as to their origin, distribution, adaptability, and leading characteristics. The stock-judging work commenced in the spring term of the freshman year is continued during this term and particular attention is given to the official scale of points, or the standards adopted by the various associations of the different breeders.

4. Feeds and Feeding. Junior year, fall term. Nutrition; composition of feeds and their preservation as affecting quality; compounding rations for growth, maintenance, fattening, and milk; feeding and preparing stock for market. The work is continued in the spring term of the senior year, when particular attention is given to the results of feeding experiments and methods of carrying on such work.

5. Farm Dairying. Junior year, winter term. A study is made of the methods and apparatus for the production and handling of dairy products in a wholesome and economical manner on the farm. Composition of milk and the causes that affect it and bring about changes. Practical work in milk testing, separating milk, ripening cream, churning, and preparing butter and milk for the market is given in the dairy room.

6. Animal Breeding. Junior year, spring term. The laws of heredity, variation, atavism, and correlation are given special attention. Prepotency and fecundity and the influences that affect them are discussed. In-and-in breeding, line-breeding, cross-breeding, grading, and the formation of breeds are taken up in detail.

7. Crops. Junior year, spring term. Choice, uses, and preservation; varieties and their improvement; planting and cultivation; rotation. Examination of crops in the field and from preserved samples given special attention.

8. Agricultural Physics. Senior year, fall term. The study of soils commenced in the fall term of the sophomore year is continued here by taking up the more intricate points of soil physics, of the movement of water in soils, the water-holding power of different soils, and soil temperatare. Irrigation and drainage are fully treated. Princi-

ples of draft, road construction, farm motors, and construction of farm buildings are subjects of study under this head.

9. FARM ECONOMICS. Senior year, winter term. Selection, purchasing, equipping, and management of farms; study of markets and marketing.

NOTE: For analysis of the course in agriculture in the School of Agriculture and Domestic Economy see page 44.

Horticulture

Professor Morris

The instruction in horticulture aims to give the student a thorough knowledge of the underlying principles of plant and fruit production and of plant evolution. The instruction in forestry is designed to afford an insight into the forest problems of the United States.

1. HORTICULTURE. Fall and winter term of freshman year. Study of orchard fruits and the cultivation and management of orchards. Winter and spring terms of sophomore year. Propagation of plants, and cultivation and management of small fruits and vegetables.

2. POMOLGY. Winter term of Junior year. Study of orchard fruits, and cultivation and management of orchards.

3. EVOLUTION OF CULTIVATED PLANTS. Winter term of senior year. A study of the current hypotheses of organic evolution as applied to the modlfication of plants, particularly those in cultivation.

4. PLANT BREEDING. Spring term of senior year. Study and practice in plant breeding.

5. FORESTRY. Winter term of senior year. The instruction in forestry covers conditions of forest growth, methods of reproduction, preservation, and harvesting; economics of forestry; forest belts, forest reserves, and national parks of the United States.

NOTE: For analysis of the course in horticulture in the School of Agriculture and Domestic Economy see page 43.

Mechanical and Electrical Engineering

Professor Chandler
Mr. Thomas
Mr. Little
Mr. Felgar

The following analysis applies to students taking the course in mechanical and electrical engineering. It indicates, also, however, the elective or regular work in the other courses as shown in the detailed outlines.

1. FRESHMAN PHYSICS. Freshman year, fall term. Elementary course in general physics.

2. Descriptive Geometry. Sophomore year, winter and spring terms. Orthographic projection of lines, planes, and surfaces. Axonometric projections, surfaces of the second order; intersections, shades and shadows, and linear perspective.

3. Mechanical Drawing. Sophomore year, fall, winter, and spring terms, afternoon. Projection on right and oblique planes, intersection of surfaces and solids; machine sketching; making of complete working-drawings; tracing and blue-printing.

4. Kinematics. Junior year, fall term. Study and design of mechanical movements, including gearing, belting, links, etc.

5. Junior Physics. Junior year, fall and winter terms. Advanced course in mechanics, sound, heat, light, and electricity.

6. Applied Mechanics. Junior year, winter and spring terms. Statics, moment of inertia, hydrostatics, hydraulics, theory of structures, kinetics.

7. Steam Boilers. Junior year, fall term. Material of construction, steam boiler design, care and operation of boilers.

8. Indicators and Valve Gears. Junior year, winter and spring terms. Detailed study of valve setting; use of indicators.

9. Thermodynamics. Senior year, spring term. Advanced discussion of the theory of heat engines.

10. Machine Design. Senior year, fall, winter, and spring terms, with afternoon work in drawing in the fall and winter terms. Determination of the proper proportion of machine parts, such as screws, bolts, nuts, shafts, and pulleys; also the designing of various parts of the steam engine.

11. Heating and Ventilation. Senior year, winter term. General principles of heating and ventilation, with a discussion of steam, hot water, and forced blast systems of heating.

12. Electricity and Magnetism. Junior year, spring term. Advanced study of electrostatics, magnetism, electric current, and batteries. The elements of alternating currents, electric lighting and power.

13. Electricity and Magnetism Practicum. Junior year, spring term. Measurement of magnetism, resistance, and electromotive force; study of batteries; use of galvanometers.

14. Electrical Engineering. Senior year, fall, winter and spring terms. Electromagnetism and magnetic circuit; direct and alternating current dynamos and motors; electric lighting; electric railways; systems of transmission and distribution.

15. Electric Lighting and Power Transmission. Senior year, winter term. The design, installation, and operation of electric lighting systems and plants, and discussion of the various systems for electrical transmission and distribution of power.

16. Telegraph and Telephone Engineering. Senior year, spring term. Principles underlying the action of practical systems and the engineering features of their construction.

17. Electrical Engineering Practicum. Senior year, fall and winter terms, afternoons. Tests of dynamos, motors, and transformers; direct current, and one, two, and three phase systems; study of arc and incandescent lamps, measurement of power and efficiency.

18. Wood Working. Freshman year, winter term. Bench work in wood; sawing, planing, and joining; center and chuck turning in wood. Instruction in care and use of tools.

19. Pattern-Making and Foundry. Freshman year, spring term. Construction of patterns; molding in sand; core making; melting iron and pouring castings.

20. Blacksmithing. Junior year, spring term. Iron and steel forging; drawing; upsetting, welding, and tempering.

21. Machine Shop. Junior year, winter and spring terms. Filing and chipping; metal work on lathes, planer, sharper, and milling machine.

Civil Engineering

Professor Chandler
Mr. Rowe

1. Descriptive Geometry. Sophomore year, winter and spring terms. Orthopraphic projections of lines, planes, and surfaces. Axonometric projections, surfaces of the second order; intersections, shades and shadows, and linear perspective.

2. Mechanical Drawing. Sophomore year, fall, winter, and spring terms, afternoon. Projection on right and oblique planes, intersections of surfaces and solids; machine sketching; making of complete working-drawings; tracing and blue-printing.

3. Surveying. Use and care of surveyors' instruments. Use, care, and adjustment of instruments. Field work, computations, maps, profiles and plats, in connection with ordinary and U. S. land surveys.

4. Advanced Mechanics. Junior year, fall, winter, and spring terms. Statics, dynamics, moment of inertia, hydrostatics, hydraulics, theory of structures, kinetrics.

5. Hydraulic Engineering. Junior year, fall term. Pressure

and motion of water. Laws of flow over weirs, through orifices, tubes, pipes, and in open channels. Measurement of discharge.

6. Irrigation Engineering. Junior year, winter term. Grades, cross-section, and capacity of canals; surveys and designs of structures; sources of water supply; analysis of hydrographic data; Oklahoma streams; return and seepage waters; irrigation by pumping. Irrigation law.

7. Roads, Streets, and Pavements. Junior year, spring term. Lectures assigned, readings and reports.

8. Blacksmithing. Junior year, fall term. Iron and steel forging; drawing, upsetting, welding, and tempering.

9. Machine Shop. Junior year, winter and spring terms. Filing and chipping; metal work on lathes, planer, sharper, and milling machine.

10. Wood Working. Freshman year, winter term. Bench work in wood; sawing, planing, and joining; center and chuck turning in wood. Instruction in care and use of tools.

11. Pattern Making and Foundry. Freshman year, spring term. Construction of patterns; molding in sand; core making; melting iron and pouring castings.

12. Machine Design. Senior year, fall and winter terms; with afternoon work in drawing in the fall and winter terms. Determination of the proper proportions of machine parts, such as screws, bolts, nuts, shafts, and pulleys.

13. Stresses in Framed Strucutres. Senior year, winter term. Analytical and graphical determinatlons of stresses in various forms of roof and bridgs trusses.

14. Design of Modern Wood and Steel Framed Structures. Senior year, spring term. Design of roof trusses; highway and railroad bridges.

15. Sanitary Engineering. Senior year, fall term. Cleaning and sewerage of cities. Design and construction of sewer systems.

16. Masonry Construction. Senior year, winter term. Masonry foundations, walls, dams, piers, abutments, arches.

17. Railroad Engineering. Senior year, fall term. Laying out curves. Location of a short line of railroad. Maps, profiles, and preliminary estimates, calculation of excavation and embankment. Turnouts and crossings. Transition curves. Maintenance of way. Structures and terminals.

19. Electrical Engineering. Senior year, fall, winter, and spring terms. Electromagnetism and magnetic circuit; direct and alternating current dynamos and motors; electric lighting; electric railways; systems of transmission and distribution.

20. Electrical Engineering Practicum. Senior year, fall and winter terms, afternoons. Tests of dynamos, motors, and transformers; direct current, and one, two, and three phase systems; study of arc and incandescent lamps, measurement of power and efficiency.

21. Thermodynamics. Senior year, spring term. Advanced discussion of the theory of heat engines.

22. Electricity and Magnetism. Junior year, spring term. Measurement of magnetism, resistance, and electromotive force; study of batteries; use of galvanometers.

Mathematics and Astronomy

Professor Means
Mr. Lawrence

1. Higher Arithmetic. Fall term, sub-freshman year. A thorough course in advanced arithmetic, giving special attention to the application of the principles of percentage to the solution of problems.

2. Algebra. Winter and spring terms, sub-freshman year, and fall, winter, and spring terms, freshman year. A thorough drill in the elements of algebra, involving factoring, fractions, simple, simultaneous, quadratic, and indeterminate epuations, inequalities, theory of exponents, logarithms; ratio, proportion, and variation; the binomial and exponential theorems; choice, chance, etc.

3. Geometry. Winter and spring terms, freshman year, and fall term, sophomore year. The elements of plane and solid geometry, involving the relations of lines and planes in space, the methods of proving theorems, the areas of surfaces and volumes of solids, and the laws of variation in similar surfaces and solids.

4. Trigonometry. Winter and spring terms, sophomore year. The development and use of trigonometric formulæ, the solution of right and oblique triangles and polygons. Also, elements of goniometry. Logarithmic computation throughout the course.

5. Analytical Geometry. Fall, winter, and spring terms, junior year. The reference of points and lines to co-ordinate axes, and the deduction of the equations of straight lines and curves of the conic sections. Also, higher plane curves.

6. Calculus. Fall, winter and spring terms, junior year, and winter term, senior year. Differential calculus, development and application of fundamental principles and formulæ, integral calculus ap-

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plications in determining length of curves, area, maxima, minima, etc.

7. Astronomy. Spring term, senior year. The solar system, discussion of position, size, density, rotation, and revolutions of planets; satellites and asteroids, nebulæ, fixed stars and constellations, comets, astronomical directions, measurements, etc.

Chemistry

Professor Holter
Mr. Shively

1. General Course. All students in all courses are required to take chemistry throughout the sophomore year. In the fall term the non-metals are studied and discussed in the lecture room, and simple manipulations, preparation of salts and gases, and group separations are taught in the laboratory. In the winter and spring terms the metals are taken up in the lecture room and complete qualitative analysis worked out in the laboratory. Each student is supplied with a full set of apparatus suitable to his work and is required to spend at least two hundred hours in the laboratory during the year. It is found that each year there are students who work in the laboratory over two hundred and fifty hours. While the laboratory period is from 1:30 to 3:30, it is the custom, as well as the policy, of the department to open the laboratory immediately after the noon hour and allow students to remain until five o'clock if they desire to do so. Again, while there are assigned days for laboratory work in chemistry, all students working in the chemical laboratories have permission to work there on any other days so long as this work does not interfere with other college duties. In the lecture room special attention is given to the arithmetic of chemistry and the working out of chemical equations, and in these equations much importance is attached to their graphical structure. Experience teaches that without the arithmetical applications of the equations by means of numerous practical problems, the fundamental principles involved in the equations are wholly lost on the student. Text books used are: Pond's Inorganic Chemistry in the class room; and in the laboratory, Dennis and Clarke's Laboratory Manual and Green and Vanderleed's Qualitative Analysis.

2. Specialized Course. Junior year: Qualitative Analysis; using in the laboratory Talbot's work during the entire year, supplemented by Fresenius, Thorp, Olsen, etc. Minimum number of hours, 260. In the class rooms the texts used are: Fall term, Remsen's Theoretical Chemistry; winter and spring terms, Perkin and Kipping's Organic Chemistry; and in the spring term three hours a week are devoted to a general discussion of mathematical and physical chemistry, Van Deventer's text being used. The recitations are fully supplemented by numerous discussions, lectures, and demonstrations.

Senior year: In the lecture room, in the fall term, special subjects along the lines of sanitary chemistry, foods and food production, pure water supplies, and sewage disposal are discussed. No text book is used but the lectures and discussions are based upon the material found in the numerous reference books in the college library. Metallurgy is taught in the winter term, Sexton's text-book being the one now used, and Thorp's Industrial Chemistry is taught during the winter and spring terms. Two hours a week are devoted to Agricultural Chemistry during the entire year in the lecture room, and one afternoon each week during the year to agricultural analysis.

3. MINERALOGY. Mineralogy is studied during the fall term of the senior year, (time, five hours a week), Crosby's tables being the outline followed. While the general principles of the subject are discussed in the lecture room, most of the time is taken up in a study of the physical properties and identification of a selected list of minerals. This work is preceded by a careful examination of known minerals such as galena, pyrites, calcite, sphalerite, and gypsum.

The laboratory work has a wide range and includes the chemistry of experiment station work, metallurgy of iron and steel, assaying, sugar analysis, (polariscopic and gravimetric), water analysis, sugar beet analysis, food adulterations and their detection, preparation of organic compounds, standardizing solutions, molecular weight determinations, abstracting of chemical literature (in connection with special laboratory work), graduation thesis.

Botany, Entomology, and Geology

Professor Nicholson

1. ELEMENTARY BOTANY. This will be a short general course in botany designed to give, in a general way, the facts with which botanical science is concerned. The recitations will be illustrated as far as possible by means of specimens, diagrams, and preparations, while the laboratory work will consist of collecting the common plants and becoming familiar with their structures and names.

Required in the spring work of all sub-freshmen.

2. ECONOMIC AND AGRICULTURAL BOTANY. This course presupposes that a student has had course 1 or its equivalent. This course deals with the morphology, relationship, properties, cultivation, collection, and geographical distribution of the plant families which furnish important commercial products and agricultural crops.

Required in the spring term of all sophomores in the General Science and Agricultural courses, four hours a week recitations or lectures, and two afternoons a week laboratory and field work.

3. Plant Morphology and Physiology. A study of the life processes of seed plants, and the anatomy of representative plants in the different families.

Recitations and demonstrations three times a week. Laboratory work two afternoons a week.

The work will be based on Pierce's Plant Physiology and Caldwell's Plant Morphology.

Required in the fall term of juniors in the Agricultural course and elective for the juniors in the General Science course.

4. Physiological and Household Botany. This course is planned exclusively for students in Domestic Science. The main part of this course is devoted to economic botany, particularly to those phases which concern household work and home life. This includes a study of useful species, as culinary, medicinal, starch, oil, and fiber producing plants. Special attention is given to yeast fermentations, enzymes, bacteria, antiseptics, fungicides, food-destroying fungi, and mushrooms.

Recitations three times a week and laboratory work two afternoons a week.

Elective in the junior year, fall term, in the Science and Literature course.

5. Plant Diseases. The more common and economically important of the diseases of plants due to the presence of parasitic bacteria, myxomycetes, and fungi form the principal subjects of this course. Lectures and recitations twice per week follow somewhat the order of Massee's Text-book of Plant Diseases, which is used as a text. The practicum, two afternoons per week, includes work on the morphological characters of the pathogenic organisms, and culture and inoculation experiments with them.

Required in the winter term of the juniors in the Agricultural course and elective for juniors in the General Science course.

6. Advanced Course in General Botany. This course goes into detail in the general study of plants. The internal and external morphology and the physiology and histology of plants will be taken up. Also a complete study of the cryptogams and phanerogams will be covered. This course necessitates the student's having taken courses 1, 2, 3, and 5. This course will cover one year and is based upon the Strasburger, Noll, Schenk, and Schimper text books in Bot any.

Elective in the spring term of the junior year and the fall and winter terms of the senior year.

7. Research Work in Systematic Botany, and History of Botany. The former is designed to give training in original investigation and is all laboratory work. Subjects are assigned each student when the class is organized. The history of botany is studied in class and is based on Sach's History of Botany.

8. Research and Thesis Work. Seniors in the General Science course who elect to write their theses in botany will choose subjects approved by the head of the department not later than the beginning of the winter term. These theses will be completed in the spring term. The subjects may be chosen from any of the lines of work of the botanical courses offered.

Seniors electing to write theses in agriculture or horticulture may have access to the books and collections of the department of botany and entomology, and secure aid from the instructors of this department.

9. Entomology. A study of the general anatomy and development of insects with reference to the habits of those of economic importance, and of the principal methods of controlling injurious insects, is followed by special study of the familles of more important beneficial and injurious insects. Recitations, three hours a week. Text, Smith's Economic Entomology. Practicum consists of laboratory and field work. Each student is required to study and make a collection of the insects on specially assigned crops and fruits.

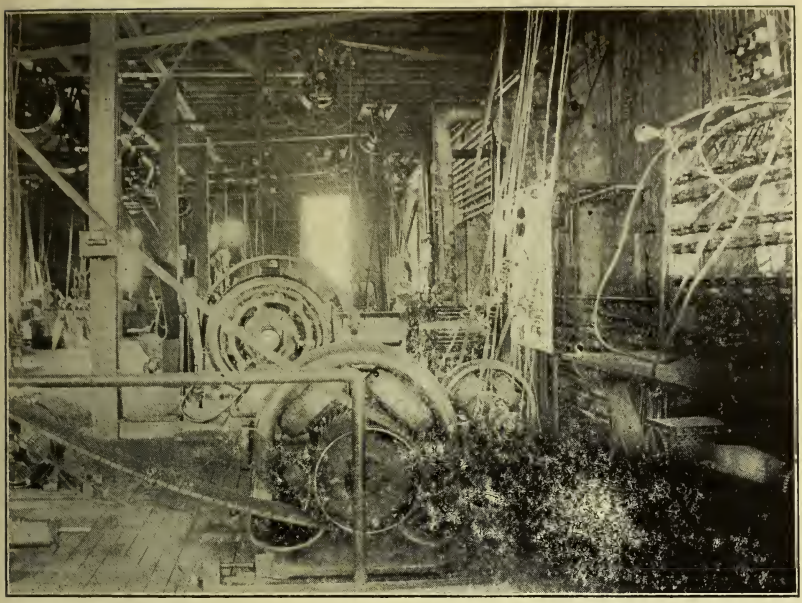
Required in the spring term of all juniors in the Agricultural course and of those in the GeneralScience course not specializing in chemistry.

10. Geology. This course is designed to give the student a fairly comprehensive course in general Geology, and to make him familiar with the geology of Oklahoma. A study is made of the origin and nature of the earth's crust, its movements, producing mountains and continental foldings, with the attendant phenomena of earthquakes, volcanoes, geysers, etc.; erosion, transportation, and deposition by wind, water, and ice; and the organic life of the various geological periods. The geology of Oklahoma is given by lectures and field work, the lectures being illustrated with museum specimens and lantern slides. The course includes a study of the soils, rocks, minerals, wells, springs, and the meteorological agents concerned in causing tornadoes, droughts, etc. Required of seniors in the fall term.

Zoology and Veterinary Science

Dr. Lewis
Mr. Wright

The work in this department is arranged with the idea of giving students who take the course in biology or those who elect work in the department as thorough an understanding of animal biology as the time will permit. The greater portion of the work is arranged and given with the idea of familiarizing the student with the general principles of the structure, function, and development of the animal body. The special subject of veterinary medicine as applied to the recognition and treatment of animal diseases is given in the regular and special



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courses as offered by the agricultural department. An outline of the work follows:

1. Veterinary Medicine. This work is given in both of the short courses offered by the agricultural department and in the regular agricultural course, senior year, winter term. The work is given in the form of lectures, recitations, and practical work. It is of a practical character and comprises especially the recognition and treatment of the common animal diseases.

2. Physiology. Elementary physiology is given during the winter and spring terms of the sub-freshman year. The work is given in lectures and recitations, supplemented by the use of models, skeletons, and charts.

3. Zoology. This subject is required of all students except those in the engineering courses, in the fall term of the sophomore year. The work includes the general principles of zoology and serves as an introduction to the advanced work in biology. Laboratory work is given four hours per week in dissecting types of the various groups of animals, the latter portion of the work being devoted to the classification of vertebrates, especially birds. The museum contains collections of insects, birds, small mammals, and a considerable number of marine animals, all of which are available for class and laboratory work.

4. Histology. An introductory study of animal tissues. Special attention is given to the structure and function of the various tissues of the body. The laboratory work consists of the preparation, staining, sectioning, and mounting of tissues for microscopic work. The projectfon microscope is used in the lecture room. This subject is given in the fall term of the junior year.

5. Advanced Physiology. Winter term of junior year. This term is devoted to detailed study of the special physiology of the blood, nervous system, digestion, etc., and in a comparative way the physiology of man and the lower animals. Mammalian dissection is taken up during the last half of the term. Discussion of general subjects in physiology is a part of the required work.

6. Cellular Biology. This work is given in the spring term of the junior year and consists of a systematic study of protoplasmic structure and function, and the general properties of the cell as an independent organism and its function in the higher animal. The laboratory work consists of working out the standard methods employed in preparing material for studies of this character.

7. Embryology. This work is given during the fall term of the senior year and includes a detailed study of the development of vertebrates, using embryos of the chick and rabbit as types. The complete

embryological history of the chick is studied as outlined by Foster and Balfour. In the laboratory work the student is expected to become thoroughly familiar with the best methods used in work of this character. The projection microscope is used in the lecture room and material prepared by the class is used for demonstration.

8. BACTERIOLOGY. The work in bacteriology extends over the winter and spring terms of the senior year and is required of all students except those in the engineering courses. This is a general course in bacteriology and the student is required to be thoroughly familiar with laboratory methods. The course in laboratory work requires the student to be familiar with the methods employed in isolating and cultivating bacteria, bacterial analysis of air, milk, water, etc. The subject is given with special reference to the relation of bacteria to disease. Diseases caused by protozoa and certain other animal parasites are studied in connection with the subject.

German and Latin

Professor Tucker
Miss Walker

One of the main objects of the courses in German and Latin is to give the student such a knowledge of these languages as will be of practical value to him in the study of the sciences. Throughout each course the technical relation of the language to the work of the institution is pointed out, explained, and emphasized. At the same time the other objects of language study are not neglected: the study of the language in and for itself, as a means of general culture, and as a prerequisite to a more intelligent and a more comprehensive study of the vernacular. The courses are as follows:

GERMAN. Sophomore class. The work of this year is devoted to a thorough drill in pronunciation, the mastery of forms and inflections, the study of the elementary principles of syntax, and the reading of German prose. Composition and conversation; memorizing of a few selected poems. Text-books: Joynes-Meissner's German Grammar; Gueber, Mærchen und Erzæhlungen; Carruth's German Reader; Storm, *Immensee.*

Junior class. The work of this year begins with the reading of descriptive and narrative prose, accompanied by a systematic drill in grammar and word formation. One term of the year is devoted to scientific German and one term to the study of German classics. Weekly exercises in composition. Text-books: Baumbach, *Der Schwiegersohn;* Wildenbruch, *Das edle Blut,* Gore's German Science Reader; Schiller, *Wilhelm Tell;* Bernhardt's German Composition; Joynes-Meissner's German Grammar.

Senior class. The aim of this course is to broaden the student's

vocabulary and knowledge of the language and literature by copious reading from standard German authors and by the study of German literature under the guidance of a suitable manual. Composition work continued. Parallel reading in general literature or in the science in which the student has chosen his special work. Text-books: Lessing, *Minna von Barnhelm;* Goethe, *Egmont;* Heine, *Die Harzreise;* Wenckebach's German Composition; Hatfield's German Lyrics and Ballads; Hosmer's German Literature.

Latin. The study of Latin is limited to the first two years of the college course. The work accomplished is that usually done in courses of like duration, the classes being employed mainly in mastering the forms of the various parts of speech, in acquiring a vocabulary, and in studying the more important rules of syntax. Careful attention is given to the translation of English into Latin. The selections for reading are supplemented by notes and grammatical references by the teacher. The purpose of these notes is to assist in *accurate* translation, as well as to enable the student to see for himself the practical application of the rules of grammar. In both years the study of Latin is made a means of mental discipline, of training the mind into methods of close reasoning, of developing the powers of observation, and of acquiring habits of thoroughness and accuracy. In a word, an effort is made to secure a high degree of mental training, as well as to teach Latin as an invaluable aid to the study of English.

History and Political Economy

Professor Gray

This department gives instruction in general history, social and industrial history of the United States, English history, civics, psychology, European history, political economy, commercial law, American history, and sociology.

1. General History. Freshman year; winter term, three hours, spring term, five hours a week. It is the purpose of this course to furnish a broad foundation for further work in history and related subjects, as well as to give a general knowledge of the facts and trend of world history. After a general view of oriental civilizations with especial reference to those which noticeably affected subsequent European conditions, special attention is given to Grecian and Roman history. The period of the middle ages is then taken up, followed by a study of modern history. Some effort will be made to induce the student to recognize the most obvious philosophical considerations; but it is especially desirable, in accordance with modern principles of education, that the student acquire a vivid appreciation of the values of human experience as recorded in history. This study is required of students in all the collegiate courses.

2. Social and Industrial history of the United States. Sophomore class. An elementary knowledge of United States history is required for admission to the college, but the work of this class comprises a study of the history of our country from the standpoint of its economic evolution. Special effort will be made to emphasize the effect of geographical and physical conditions upon our industrial progress, to show the connection between political events and social developement, and to point out the most obvious economic tendencies as revealed in the light of present conditions. This study is required of all Sophomores in the General Sclence course. Winter term, five hours a week.

3. English History. Junior year. Fall term, five hours a week. This study is an elective for students in the Science and Literature course. It is designed to make the student familiar with the main facts of English history. In addition, special effort is made to show the characteristics of the Anglo-Saxon race and to emphasize the causes and features of its wonderful developement. It is also desirable that a close connection be established in the mind of the student touching the course of events of English history as related to the salient features of European and American history.

4. Civics. Science and Literature course. Junior year. An elementary knowledge of American civil government is expected of all students who enter the college. This study, however, includes general civics and constitutional history. The development of the leading principles of government is traced from their origin in ancient times. The influence of Teutonic polity, of Roman law, and of feudalism as contributing to the political institutions of modern times, is emphasized. The student is then given a general knowledge of some of the principal governments of modern times, with special emphasis upon those of England and the United States. Text "The State", by Woodrow Wilson. Winter and spring terms, three hours each week. Elective for Science and Literature students.

5. Psychology. Junior year, spring term, five hours a week. This course is general in scope and comprises the study of the states of consciousness and of mental processes, with an outline of the structure and functions of the nervous system. The student is led to discuss the most important psychological theories, and an effort is made to lead him into a fuller knowledge of the principles that govern mental training and the application of psychology to education.

6. History of Western Europe. Senior year. The story of European civilization is continental and international in its scope as well as local and national. Beginning with the Fall of the Roman Empire in the west, the student of history is confronted with movements of such magnitude as to be of enormous consequence in influencing

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human development. The Papacy, the Crusades, Feudalism, the Renaissance, the Protestant Reformation, and the revolutionary movements of modern times, together with the progress of the people of Western Europe in arts, culture, and literature, are the materials which comprise the substance of this course. At the same time, attention is paid to the main points of national history and to the connection between these and the development of England and the United States. This study is an elective in the Science and Literature course. Fall term, four hours each week.

7. Political Economy. Senior year. Fall term, four hours per week. A consideration of the nature and laws of labor, capital, money and credit, taxation, international trade, etc. Especial emphasis is given to the problems growing out of monoplies and trusts, the present socialistic tendencies, etc. Elective in the Science and Literature course.

8. Law. Senior year, fall term, four hours each week. The student uses a text, but this is supplemented by lectures, covering those laws of business that are believed to be useful to him in actual business life. Required for students in all classes.

9. American History. Senior year. Winter and spring terms, four hours each week. While the student, upon entering college, is required to give evidence of an elementary knowledge of American history, the present course is intended to make him still more familiar with the subject. An effort is made to point out the underlying forces contributive to the development of the United States, to trace the varying political conditions of our history, and to acquaint him with the men who have made America great. Elective for students in the Science and Literature course.

10. Sociology. Senior year. Winter term, four hours per week. The student is taught the origin and nature of society. An effort is made to acquaint him with the laws which underlie the workings of the social body, and to cause him to realize the scientific nature of the study of modern social life. At the same time, modern pathological conditions in the social body, in connection with reform, are discussed. Elective in the Science and Literature course.

Domestic Economy

Miss Landes
Miss Morrow

The purpose of introducing the study of domestic economy into the college course is to afford a training in the special subjects which pertain to the arrangement and management of every home. When these are considered in their close relation to the sciences, the care of the

household, instead of appearing irksome or ignoble, becomes interesting, dignified, and a means of broad intellectual culture.

As far as possible, the work of this department correlates with the other college studies. It is subject to the usual regulations regarding entrance requirements, examinations, and class records. An outline of the course planned for the ensuing year follows:

Freshman Year. In both cooking and sewing the work is continuous throughout the year.

Cooking. The study of food materials as regards chemical composition, nutritive value, suitable combinations, and digestibility receives particular attention. The fuels in common use and the construction and management of various kinds of stoves are considered. Practical work consists of the preparation of simple dishes from ordinary materials. Care is taken that the student learns to reason from cause to effect, and vice versa.

Sewing. Instruction comprises the various stitches used in hand sewing, including the different seams, hems, patching, darning, etc. Later, the use, care, and management of sewing machines are taught. The drafting, cutting, and making of simple underwear completes the practical work of the year.

Sophomore Year. The course extends through the winter and spring terms. It is intended only for those specializing in domestic economy. Hygiene: sanitation, history of costume, and millinery are studied.

Hygiene. In this course it is the purpose to give a practical knowledge of the functions of the human body, and to show the need of personal responsibility in the care and improvement of health.

Sanitation. Attention is given to the situation and surroundings of the house; also to water supply, drainage, ventilation, heating, lighting, furnishing, and cleaning.

Millinery deals with the application of line, form, color, and texture in the making and trimming of hats from buckram, straw, felt, velvet, and tulle. Economy and care of materials are taught in the renovating of silk, satin, velvet, feathers, etc.

Junior Year. Domestic economy extends throughout the year, training being given in cooking, marketing, the history of foods, table service, social observances, and sewing.

Cooking. Work along practical lines is a continuation of that done in the Freshman year, but advanced in character. Entire meals of a simple nature are prepared and served.

Table Service. Besides the actual serving of ordinary meals, lectures are given regarding the service required for ceremonious occasions. Attention is paid to the laundering of table linen; care of silver, glass, and china; also, the general care of the dining room.

Social Observances. Discussions considered. The usages of good society, including manners, conversation, forms of address, introductions, entertainments, calls, etc.

Marketing. The selection of meat is taught from meat charts, and by visits to meat markets. The selection, cost, and care of other food materials are considered; also food production, and manufacture.

Sewing. Drafting from exact measurements, cutting, and fitting are taken up, each student making at least one entire suit.

SENIOR. The course is continuous throughout the year, the subjects treated being home nursing, invalid cookery, textiles, home economics, chemistry of foods, and food adulteration.

Home Nursing. This is designed to enable women to care intelligently for cases of sudden ill ness or accident; and to perform the duties of a nurse when trained service is not employed. Precautions against the spread of disease, use of disinfectants, and quarantine regulations are considered. Practical work is given in the preparation of foods for invalids.

Textiles. Under this topic, discussions deal with the development of primitive industries; the growth of fibers; their properties, manufacture, adulteration, and comparative economic value.

Chemistry of Food. By laboratory methods, the constituents of food are determined; also, the effect of heat upon them; and approximately, the action upon foods of the digestive juices.

Home Economics. This includes discussions regarding the evolution of the house; homes of various peoples as affected by climate, industrial and social conditions; cost of living; divisions of income; household accounts; cash and credit system; savings and investments; domestic service.

For those specializing in domestic economy, additional subjects required are art needlework, evolution of recipes and proportions, methods in teaching domestic economy, and comparative study of American and foreign cookery.

School of Agriculture and Domestic Economy

Professor Riley
Miss Landes
Miss Morrow
Mr. Barton

As indicated elsewhere this course covers two years of twenty weeks each, from October 16 to March 15. Experience has shown that many young people come to this institution who for various reasons can remain but one or two years. This course is arranged to the end of giving them a measure of the practical and technical work which is given in a more ample form later in the course. At the same time work in the common school branches is given throughout the course, so far as it can

be done without prejudice to the scientific and practical work of this department. The course is so arranged that the work in agriculture scheduled for the two years may be taken in one, withont carrying the common school studies. This will be permitted in the case of students who are well grounded in the common branches, or in the case of adult students regardless of their preparation. Students who can come only during the winter term, will be permitted upon the approval of the head of the department to select from the offered courses such work as best suits their needs. The special work in agriculture will be based upon the following outline.

Requirements For Admission

Persons fifteen years of age or over may take this work; but we do not encourage students under sixteen to take it. The student should be able to do eighth grade work, and may be examined for admission in the discretion of the head of the school. Certificates will be granted to those who have completed the course satisfactorily.

Agriculture

The special work in agriculture will be based upon the following outlines:

LIVESTOCK AND STOCKJUDGING. This work is taken up during the winter term of the first year. The most important breeds of cattle, sheep, swine, and horses are studied as to their leading characteristics and adaptability; methods of handling these for best results are given due consideration. The stockjudging work is carried on at the barn, where the student is first given score card work and then comparison of the various individuals and breeds.

DAIRYING. In the fall term of the second year the best methods of handling and profitably disposing of the milk on the farm are taken up. The need of care and cleanliness is emphasized, and simple and economical methods are given briefly and illustrated. A well equipped dairy building gives opportunity for the practical work in butter making and milk testing.

POULTRY. The time alloted to this study in the fall term of the second year is devoted to a study of the most important breeds of chickens and other fowls. The raising, management, dressing, and marketing of poultry are important features considered.

SOILS AND CROPS. During the winter term of the second year a study of the characteristics of soils as influencing their water-holding power, and the liberation of plant food and its availability, is taken up, as well as the general questions of soil tillage. Following this comes the study of the adaptability of crops to different conditions and for different purposes, their selection, improvement, harvesting, and marketing.

Stock Feeding and Management. This subject is taken up during the winter term in the second year. In the work the composition of plants and animals is compared; the nutritive value of the different feeds is studied; compounding rations for fattening and growing the different kinds of stock is an important and interesting feature of the work.

Comparative Physiology. The class work is illustrated by means of large charts, skeletons, manikins, and dissections. Important points of difference between human and animal physiology are pointed out in preparation for the second year's work in veterinary medicine. Matters of home and personal hygiene are introduced in connection with the physiology work.

Veterinary Medicine. A practical study of the recognition and treatment of the common animal diseases.

Agricultural Chemistry. One term is given to the study of elements and compounds which are of importance to agriculture. The work is planned to familiarize the student with the more important chemical changes which take place in every day life. The composition and utilization of farm crops for food purposes and the application of the principles of chemistry to plant and animal life form the basis of the work.

Horticulture and Floriculture. Fall term of second year. A study of the most successful methods of planting and cultivating fruit trees, berries, grapes, flowers, etc., in this climate. Lectures and text. The work in gardening will be practical work in planting seed, transplanting plants, budding, grafting, and pruning.

Entomology. The commoner insects and means for their destruction are considered. Different types of spraying apparatus and a large collection of insects are used to illustrate and supplement the lectures.

Botany. The fundamental principles of germination, plant growth, and seed production are presented, and a general consideration of the adaptation of different plants to varying conditions, thus enabling the student to acquire a more thorough understanding of the growth of plants and their requirements.

Drawing. The student will be taught the practical value of drawing for the purpose of designing and arranging buildings, machinery, etc. Work in the carpentry shop will be from his own drawings, the student thereby learning the practical application. Designs will be made for dwellings, barns, out-houses, and machinery, and estimates made of material required and cost of conztruction.

Carpentry. Instruction will be given in the use and care of the

common carpenter tools such as should be found on every farm; also, methods of farm building, construction, framing, laying out rafters, stairways, estimating building materials, painting, etc. In the shop, students will be required to make such exercises as will give them some practice in using carpenter tools. They will be required to make mortice joints, splices, drawing boards, hammer handles, single trees, eveners, etc. Each student will be required to file his own saws, sharpen his planes, chisels, etc.

Farm Mechanics. Fall term, second year. The work will consist of planning farms, wind-breaks, fences and fence-building, etc. Lectures will be given on the construction of buildings, sanitary stock ponds, cisterns, care and management of farm and power machinery. Practical work will be given in taking apart and putting together different kinds of farm machinery. The object of this work is to enable the student to select intelligently from the different types offered in the market the machinery adapted to his use.

Blacksmithing. The student will be instructed in the management of forge and fire, and bending, shaping, and welding iron and steel. He will be required to make chain links, rings, hooks, bolts, clevises, whiffle-tree irons, tongs, cold chisels, and punches, and to become familiar with the operations necessary to enable him to do his own repair when he returns to the farm. Particular attention will be given to rapid and accurate welding and to the shaping and tempering of steel tools. Each student will be taught to make his own tools, so that he will be able to furnish his shop at home with but very little outlay.

Engines and Boilers. This work will be offered on Mondays and will be optional. Students will be taught by lectures, models, and traction engines the exact construction of an engine and boiler, how to care for the entire machine, and how to manage it successfully. The practice work will include the following: valves and pipe fittings, injectors, packings, governors, lubricators, safety valves and eccentric settings, pumps, belt lacing, etc.

Farm Accounts. The work in accounts will be applied to the transactions which the student meets in the various duties on the farm. He is taught to keep his accounts that he may know at any time the profit or loss of any department of his business, and thus be enabled to plan intelligently.

Domestic Economy

The work in domestic economy is designed for all young women in this department; the aim being to give such training as shall fit them for the duties of everyday life. It is considered desirable that the stu-

dents acquire a certain amount of technical skill; and that they learn to work with neatness, carefulness, and despatch. Yet especial care is taken to develop the reasoning faculties, and to show that the affairs of the household are governed by scientific principles and not by "luck". Cooking, sewing, hygiene, and sanitation are the subjects taugnt.

First Year. Cooking. Simple dishes are prepared from materials such as are used in the average household. The ordinary foods are studied from the standpoints of nutritive value and digestibility, as affected by the various methods of cooking.

Hygiene. This is given in a very practical way, the endeavor being to make it comprehensible even to those who have not studied physiology.

Sewing. Handwork occupies the first year, the student making samples which show the various stitches, hems, patches, etc.

Second Year. Cooking. In this year the students are able to take up advanced work in cooking, Some practice is given in table service. Food production and manufacture are studied.

House Sanitation. This subject deals with the general care of the house, cleaning and cleansing agents, ventilation, heating, lighting, disposal of waste, etc.

Sewing. The care and management of sewing machines is taught. Each student learns to draft from exact measures; also to cut and fit. All are expected to make at least one entire suit.

Music

Vocal or instrumental (piano) music is offered in certain portions of the Science and Literature course as an elective with other studies, individual instruction being given in voice culture or piano, the student to pay for the same according to a definitely arranged schedule of fees. Special students may take vocal or instrumental music at all times in connection with other studies, individual lessons to be paid for by the student. Instruction in sight reading and in quartet and chorus singing is offered free of charge to all students. A separate bulletin is issued giving details of the instruction in music, and can be had on application.

Public Speaking

This work is given for the present by the President of the college, assisted by Mr. Lawrence. All juniors are required to take it during the winter term, and juniors in the Science and Literature course during the spring term. So far as the work is carried at present the aim is to secure, in as great a degree as possible, ease and grace of ordinary public expression.

Stenography and Typewriting

Mr. Linn

Those desiring to enter this department must be prepared at least to enter the sub-freshman class, and must not be less than eighteen years of age. Students having a good common school education may finish the course in shorthand in one school year, nine months. The success and proficiency of the student will depend entirely upon his energy, ability, and previous training. The student who devotes nine months to this work is better prepared to take up the duties of an office or an amanuensis than the student who devotes only five or six months to it. The general requirements of a competent stenographer do not consist simply of the ability to write shorthand. There must be a knowledge of composition, punctuation, capitalization, grammar, spelling, and the proper arrangement of sentences. For this reason we require students before finishing the course to pass a satisfactory examination upon the subjects named above in addition to the regnlar examination in shorthand.

Typewriting requires from three to six months of steady application to gain a satisfactory speed. Students studying stenography will also be required to learn typewriting.

In addition to the work done in stenography and typewriting, students are drilled in the use of letter press copying, indexing, letter filing, manifolding, mimeographing, etc.

For finishing in this department a speed of one hundred words per minute of new and miscellaneous matter from dictation, the same to be read back accurately and promptly, is required. Upon the typewriter the student must be able to write thirty words per minute from his shorthand notes, the work to be free from errors.

Business Course

Mr. Linn

This course extends throughout the year. In addition to the instruction in stenography and typewriting outlined above, a complete course is given in bookkeeping, its several branches and specialties, in commercial law, business forms, and business correspondence. All students in this course are required to take English under the direction of the faculty.

Printing

Superintendent Gelder

This subject is given to special students and to such regular students as desire it and are able to carry it without prejudice to their regular work. The student is first taught the mechanical requirements of composition. After becoming familiar with this work special atten-

tion is given to spelling, capitalization, syllabication, punctuation, and to correcting proof. The student is also given practical instruction in imposition, making ready on platten presses, and feeding and care of job presses. The college and station jobbing work, including catalogues and announcements, is done here, and a monthly publication, *The College Paper* is issued from the press. Students assist in all this work and *The College Paper* is a student publication, though speaking officially for the college.

Drawing

All students in the freshman class take freehand drawing during the fall term. During the winter term of this year men alone take geometrical drawing in the General Science and Science and Literature courses, as a required study, and in the Agricultural course as an elective. Freehand drawing is also given to the students of the School of Agriculture and Domestic Economy during the winter term of the first year. Mechanical drawing is given by the department of Engineering, and reference is made to the outline of that department, page 17.

Laboratory and Field Work

Paramount stress is laid upon the experimental and practical work of the laboratory, and the afternoons are given over to this character of instruction. In agriculture and horticulture the livestock, the implements of husbandry, the green-house, the forestry plantations, and the farm itself with its operations, constitude the laboratory. In engineering the wood working shops, machine shops, electrical shops, foundry, and blacksmith shops are in operation for practical work by the students. In chemistry, the quantitative and qualitative laboratories are occupied by students practically every afternoon throughout the academic year. In botany and entomology the afternoon work is devoted to examination, analysis, and classification under the microscope. In zoology and comparative anatomy, practical work is given in the afternoon in connection with living, mounted, and unmounted subjects and models. In bacteriology the laboratory work is devoted to the identification of bacteria, the action of disinfectants, the growing of colonies, the examination of substances for bacteria, etc. Freehand and mechanical drawing, bookkeeping, and surveying are also given in the afternoon. In domestic economy the kitchen, dining room, and sewing room are constantly occupied for practical work in these lines.

Special Studies

Students, not candidates for degrees, may take such special work as they desire, subject to the approval of the President; Provided, That no student shall be entitled to take such special work until he is ad-

judged to be able to enter the sub-freshman class; Provided further, That students of mature age, not candidates for a degree, may elect special studies, with the consent of the President, without being compelled to fulfill the entrance requirements above mentioned, if in the judgment of the heads of the department concerned, such student can successfully carry the work. Regular students in good standing may take work additional to their prescribed course with the consent of the President and the heads of the departments concerned. A student not in good standing in any regular course will not be permitted to change to a special course.

Electives

Students must hand to the secretary of the faculty, not later than June first in each year, a list of first and second choice electives which they have chosen for the next year. Work in the departments of Botany, Chemistry, Domestic Economy, Mathematics, and Zoology is continuous, and in order to elect specific work in any of these departments all previous work must have been taken. This statement does not apply to agricultural chemistry during the senior year.

General Information

Location The seat of the Agricultural and Mechanical College is Stillwater, in Payne county, a city of four thousand people, most beautifully and healthfully situated. It is on the line of the Oklahoma Eastern branch of the Atchison, Topeka, and Santa Fe railroad.

Moral Influence All the leading churches are represented in Stillwater and the students are encouraged to attend and participate in their services. As a matter of fact, the young people's societies of the several churches are sustained very largely by students from the college. A Young Men's Christian Association and a Young Woman's Christian Association are actively engaged in the numerous and beneficial lines of work characteristic of these organizations among students.

Board and Rooms Board with room in private families can be obtained for $2.50 to $3.50 per week. Furnished rooms, $1.50 to 3.00 per month, if two occupy the room. A considerable portion of the students board in students' clubs, thus reducing expenses in that line to $1.75 to $2.00 per week.

Other Expenses Tuition is free. An incidental fee of one dollar per term is charged students entering from Oklahoma and Indian Territories. A fee of five dollars per term is charged students under twenty-one years of age entering from elsewhere. Text books will cost from $3.00 to $5.00 per term. Special students in stenography and typewriting are charged $2.00 per term for use of typewriter. A deposit of $2.00 per term is required of all students in the sophomore class in chemistry to cover laboratory breakage.

Library The use of the college library is free to all students. Every department of the college is largely represented in it, and it contains, besides, numerous reference books and the principal home and foreign periodicals. Students are permitted to consult freely, in the reading room, the reference books and periodicals, and to take to their rooms all other books under proper restrictions.

Literary and Other Societies General literary societies are always in operation among the students. The Chemistry Association, the Biological Club, the Mechanical Engineering Society, and the Agricultural Society are organizations of special students in the lines indicated, for supplementary work. The Athletic Association has charge of all local college sports, Field Day exercises (April 22), and of the interests of the institution in the intercollegiate meets. The Oratorical Association has charge of the representation of this college in the preliminary and intercollegiate oratorical contests.

Athletics Interest in athletic sports is deliberately fostered and encouraged by the authorities. Special benefit to the individual student is noted in connection with the general sports which culminate in the annual intercollegiate meets. Nearly all of the young men of the college show in their physical condition the salutary influence of this training, and of the regular and temperate habits that must accompany it. Basket ball and tennis are partcipated in by the young women. As noted elsewhere, a gymnasium has been erected and equipped during the past year, and a physical director employed. All students will be required to take systematic physical instruction and exercises, except those doing work about the farm or buildings which may be taken as equivalent.

Self Help The operations of the college farm and experiment station are carried on very largely by student labor, for which reasonable remuneration is allowed. This, in connection with other positions about the college buildings and grounds, and such opportunities as are afforded in the city, has enabled a very considerable number of students practically to make their way through the course. Many students are thus assisted and encouraged every year—the preference being given to those whose college work is meritorious. It must not be gathered from this that the college engages to afford employment sufficient to enable every worthy young man to complete the course without other resources. With the growth of the institution has come an increased demand for this employment which it is impossible to meet in full.

Prizes A number of permanent prizes have been established for excellence in various features of work. The Wikoff Prize, offered by Hon. Frank J. Wikoff, president of the board of regents, is for scholarship in the senior class, and carries $25, $15 for the first and $10 for the second place. The President's Prize of $10 is offered for excellence in scholarship in the freshman class. The Tucker Prize (trophy or medal), by Professor Robert H. Tucker, is offered for the best English theme written by a sophomore. The first Wikoff Prize was won last year by John A. Nelson, of Stillwater, and the second by Harry Comstock, of Idaho Springs, Colorado. The President's Prize was won by Ida M. Stover, of Stillwater.

Roll of Students

Abbreviations: *Gen. Sc.*, General Science Course; *Agr.*, Agricultural Course; *Engin.*, Engineering Course.

Seniors

Atkinson, Mary B.	*Gen. Sc.*	Stillwater
Braden, Gertrude M.	*Gen. Sc.*	Watseka, Ill.
Brown, Charles W.	*Gen. Sc.*	Meeker
Carson, Ross L.	*Gen. Sc.*	Stillwater
Chandler, Emma A.	*Gen. Sc.*	Stillwater
Clark, Arthur C.	*Engin.*	Stillwater
Eberle, Dovie V.	*Gen. Sc.*	Glencoe
Howell, Carl E.	*Engin.*	Blackwell
Lowry, Theo M.	*Gen. Sc.*	Stillwater
McElroy, Clarence H.	*Agr.*	Jennings
Miller, Bertha	*Gen. Sc.*	Stillwater
Olentine, Fred B.	*Gen. Sc.*	Sapulpa, Ind. T.
Osborne, John C.	*Engin.*	Bellefonte, Ark.
Semke, Grace E.	*Gen. Sc.*	Covington
Smith, Stewart G.	*Gen. Sc.*	Stillwater
Walker, Veda R.	*Gen. Sc.*	Glencoe
Wilson, James	*Gen. Sc.*	Garber

Juniors

Bras, Ruth Roxie	*Gen. Sc.*	Stillwater
Chester, Bertha M.	*Gen. Sc.*	Stillwater
Dougan, Elmer	*Engin.*	Pawnee
English, Maude M.	*Gen. Sc.*	Renfrow
Hancock, Avery V.	*Agr.*	Morrison
Hoke, Harry G.	*Engin.*	Stillwater
Hoke, Charles E.	*Agr.*	Stillwater
Lantz, Arthur G.	*Engin.*	Blackwell
Lantz, Calvin R.	*Engin.*	Blackwell
Morrison, Edwina	*Gen. Sc.*	Stillwater
Mott, Isaac E.	*Engin.*	Deer Creek
Ratcliffe, J. Anderson	*Agr.*	Perkins
Reeve, Henry W.	*Agr.*	Choctaw City
Reeve, Charles T.	*Engin.*	Choctaw City
Taylor, S. Jeannette	*Gen. Sc.*	Renfrow
Wiar, Pearl L.	*Gen. Sc.*	Stillwater

Sophomores

Anderson, Rex E.	*Gen. Sc.*	Woodward
Baird, Robert O.	*Gen. Sc.*	Cuba, Kans.
Baker, George S.	*Gen. Sc.*	Pawhuska
Bennett, Paul	*Engin.*	Marshall
Boley, Albert L.	*Engin.*	Enid
Carter, Elsie M.	*Gen. Sc.*	El Reno
Clark, Frank J.	*Gen. Sc.*	Deer Creek
Cole, Frank	*Gen. Sc.*	Stillwater
Cook, Edward W.	*Engin.*	Blackwell
Douglass, Reed E.	*Engin.*	Stillwater
Francis, Victor H.	*Engin.*	Piedmont
Gager, Ernest H.	*Engin.*	Glencoe
Hall, Howard W.	*Engin.*	Stillwater
Hamon, Fannie E.	*Gen. Sc.*	Stillwater

Hamon, Chester A.	*Engin.*	Stillwater
Hogan, James A.	*Gen. Sc.*	Hobart
Holmes, O. Wendell	*Agr.*	Stillwater
Holmes, D. Lynn	*Gen. Sc.*	Stillwater
Jacobs, Ansley F.	*Engin.*	Webster City, Iowa
Janeway, Lenore	*Gen. Sc.*	Stillwater
Lettier, Clarence R.	*Agr.*	Stroud
Lovett, A. Lester	*Agr.*	Hunter
Mayginnes, Arthur H.	*Gen. Sc.*	Tulsa, Ind. T.
McCall, James G.	*Agr.*	Ardmore, Ind. T.
Moore, Albert I.	*Engin.*	Kingfisher
Moore, Raymond H.	*Gen. Sc.*	Stillwater
Peck, Oliver T.	*Engin.*	Kingfisher
Reed, E. P.	*Gen. Sc.*	Tonkawa
Rohrer, John H.	*Engin.*	Guthrie
Stover, Ida M.	*Gen. Sc.*	Stillwater
Tillotson, Bonnie R.	*Gen. Sc.*	Coyle
Wood, Clarence A.	*Engin.*	Stillwater
Wright, Andrew H.	*Agr.*	Fowler, Kans.
Znamenacek, Ed	*Engin.*	Glencoe

Freshmen

Baade, Hermann J.	*Gen. Sc.*	McLoud
Barnes, Gladys	*Gen. Sc.*	Orlando
Blackwood, Urban H.	*Engin.*	Red Rock
Blackwood, George H.	*Gen. Sc.*	Red Rock
Blue, True C.	*Engin.*	Hall's Summit, Kans.
Bradwell, Olive	*Gen. Sc.*	Mulhall
Brock, Roy C.	*Gen. Sc.*	Stillwater
Bryan, Edwin K.	*Engin.*	Cashion
Bullen, Clarence K.	*Engin.*	Stillwater
Burke, Marcus	*Engin.*	Perry
Burnett, Ruth	*Gen. Sc.*	Stillwater
Campbell, Thomas F.	*Gen. Sc.*	Bristow, Ind. T.
Carter, Charlton	*Engin.*	Glencoe
Crane, Hubert R.	*Engin.*	Arapahoe
Crawford, Charles W.	*Agr.*	Apache
Dent, Nellie B.	*Gen. Sc.*	Stillwater
Dodge, Will H.	*Engin.*	Shawnee
Freiday, Don S.	*Gen. Sc.*	Bliss
Gaasch, Glenn M.	*Engin.*	Stillwater
Gallagher, Edward C.	*Engin.*	Deer Creek
Gougler, Frank A.	*Engin.*	McLoud
Grant, John P.	*Gen. Sc.*	Woodward
Gray, Lawrence E.	*Gen. Sc.*	Pawnee
Grimes, Lawrence S.	*Engin.*	Cleveland
Hagar, Hyral S.	*Gen. Sc.*	Stillwater
Hamilton, Frank C.	*Gen. Sc.*	Marena
Hancock, Joy B.	*Gen. Sc.*	Morrison
Haydon, Jesse W.	*Enign.*	Calumet
Hays, Agnes G.	*Gen. Sc.*	Stillwater
Hays, Frank A.	*Agr.*	Stillwater
Hemphill, Ora L.	*Engin.*	Stillwater
Henderson, Retta C.	*Gen. Sc.*	Yale
Irvin, John A.	*Gen. Sc.*	Stillwater
Jackson, Vern	*Gen. Sc.*	Okmulgee, Ind. T.
Jackson, T. L.	*Gen. Sc.*	

Johnson, Alex	*Gen. Sc.*	Okmulgee, Ind. T.
Johnson, Mead	*Engin.*	Okmulgee, Ind. T.
Johnson, Norma N.	*Gen. Sc.*	Stillwater
Kerr, Elinor	*Gen. Sc.*	Stillwater
Kerr, Jay	*Agr.*	Stillwater
Kirkpatrick, Cecil I.	*Gen. Sc.*	Stiltwater
Lahman, Ruth A.	*Gen. Sc.*	Stillwater
Lahman, Wilber L.	*Gen. Sc.*	Stillwater
Lewis, Myrtle I.	*Gen. Sc.*	Stillwater
Lindsay, Roy V.	*Engin.*	Kingfisher
Lobsitz, A. Leo	*Engin.*	Perry
Lorensen, Loren	*Engin.*	Yukon
McBride, Iva A.	*Gen. Sc.*	Stillwater
McNeal, Paul A.	*Engin.*	Guthrie
McPheeters, Margaret	*Gen. Sc.*	Stillwater
McPheeters, William H.	*Engin.*	Stillwater
Mitchell, Lloyd C.	*Gen. Sc.*	Stillwater
Nichols, Orlo B.	*Gen. Sc.*	Tulsa, Ind. T.
North, Flo	*Gen. Sc.*	Tulsa, Ind. T.
Peacock, Vergil	*Gen. Sc.*	Billings
Rabon, Edwin M.	*Agr.*	Bokoshe, Ind. T.
Spalding, Isaac	*Gen. Sc.*	North Enid
Springer, Mamie	*Gen. Sc.*	Sparks
Stebbins, Albert A.	*Engin.*	North Enid
Stebbins, Robert R.	*Gen. Sc.*	North Enid
Stewart, Lee	*Engin.*	Stillwater
Stover, Nannie	*Gen. Sc.*	Stillwater
Straub, Otto	*Agr.*	Independence, Kans.
Tandy, H. A.	*Gen. Sc.*	Woodward
Tate, J. Arnold	*Engin.*	Stillwater
Taylor, William S.	*Agr.*	Renfrow
Thompson, Millene	*Gen. Sc.*	Stillwater
West, DeWitt C.	*Agr.*	Stillwater
Winter, N. Elmer	*Agr.*	Cashion
Wise, Mabel	*Gen. Sc.*	Stillwater

Sub-Freshmen

Albright, Warder	Perkins
Allen, Stanley H.	Uncas
Austin, Raymond W.	Stillwater
Barnes, Harry B.	Stillwater
Bayless, Charles E.	Maple City, Kans.
Beery, Gertrude G.	Stillwater
Blackwell, Treva R.	Stillwater
Bergthold, John W.	Wellman
Briggs, T. Leroy	Stillwater
Bulling, Bertha M.	Holdenville, Ind. T.
Capell, G. Vernon	Ottumwa, Iowa
Clark, Belle M.	Stillwater
Clausen, Roy E.	Stillwater
Cleveland, Frances L.	Stillwater
Collins, James B.	S. McAlester, Ind. T.
Comstock, Frank	Idaho Springs, Colo.
Coston, Don L.	Cleo
Crawford, Sadie E.	Stillwater
Cunningham, Mildred	Ingalls
Dean, Harry	Custer City

Demorest, Robert E. - Stillwater
Duncan, Ralph P. - Otoe Agency
Dvorak, George C. - Elgin, Ill.
Elliott, Vernon O. - Stillwater
Emerson, J. Edward - Hobart
Evans, William H. - Ash Grove, Mo.
Evans, A. Ray - Ash Grove, Mo.
Feagin, Charles M. - Kildare
Flow, Perrin W. - Ardmore, Ind. T.
Frye, Roy - Tulsa, Ind. T.
Ginter, Rolla E. - Jefferson
Goom, Austin H. - Stillwater
Grooms, Etha L. - Glencoe
Hagar, Alice J. - Stillwater
Hamilton, J. Homer - Stroud
Harp, Nell R. - Stillwater
Harrell, Hugh L. - Calvin, Ind. T.
Hart, Benjamin L. - Enid
Hatch. Carl C. - Weleetka, Ind. T.
Hausam, George - Perry
Henry, Martin - Verden
Herbert, Willis L. - Cleveland
Hesser, J. H. - Glencoe
Hetherington, Edna C. - Stillwater
Hill, Edith B. - Coyle
Hill, Vergil W. - Lucien
Horton, Ollie E. - Stillwater
Hoskinson, Forest E. - Stillwater
Hughes, J. Otto - Muskogee, Ind. T.
Hughes, S. Harper - Muskogee, Ind. T.
Hutto, Charles N. - Stillwater
Jones, Clara C. - Lawton
Jones, C. Shelley - Sayre
Kenworthy, Lottie M. - Stillwater
Kenworthy, Lloyd W. - Stillwater
Kenyon, Rodney E. - Ponca City
Kirkpatrick, Katie C. - Stillwater
Lewis, Ermine - Coyle
Longacre, Charles G. - Shawnee
Lytton, Gladys O. - Stillwater
Maule, George H. - Welsh, La.
Mayes, Ridge - Grove, Ind. T.
McBride, John - Stillwater
McCune, Barton S. - Deer Creek
McKee, Hory C. - Cooperton
McMillan, Pearl C. - Perkins
McNabb, Fred C. - Guthrie
McReynolds, Pearl A. - Stillwater
Miller, Roy F. - Stillwater
Mitchell, Jethro F. - Wewoka
Neerman, Frank W. - Stillwater
Newcomb, Harley C. - Stillwater
Noble, Hubert A. - Stillwater
North, Kate - Tulsa, Ind. T.
O'Brien, Arthur B. - Russett, Ind. T.
Oliver, Fred - Davenport

Oursler, Henry - Stillwater
Oursler, Archie C. - Stillwater
Owens, Myrtle E. - Tulsa, Ind. T.
Pearson, Mary A. - Stillwater
Percy, Ralph A. - Thomas
Perry, Ralph - Cushing
Perryman, James T. - Morrison
Poland, Carter D. - Oklahoma City
Polson, Roy S. - Pawnee
Potter, Eva E. - Stillwater
Potter, Edgar L. - Perkins
Potter, Will T. - Stillwater
Pray, Pearl M. - Stillwater
Reynolds, Oris H. - Reynolds, Ind. T.
Roberson, Nora E. - Stillwater
Rogers, Almira - Stillwater
Rudd, Lynn - El Reno
Russell, Guy M. - Sayre
Sanders, George E. - Altona
Sawyer, Arthur W. - Enid
Schiewe, Emil - Morrison
Selement, Frank J. - Yukon
Smith, Ray C. - Stillwater
Sommerville, Oliver - Breckenridge
Spaulding, Harry B. - Ralston
Spohn, Ralph E. - Glencoe
St. Clair, Brutus E. - Keystone
Stewart, Annabel - Stillwater
Stovall, Sadie E. - Stillwater
Sullivan, Perry L. - Pauls Valley, Ind. T.
Tankersley, Percy A. - Stillwater
Tapp, H. Frank - Stillwater
Taylor, Austella M. - Stillwater
Thatcher, John - Stillwater
Thomas, Jesse R. - Watonga
Tillotson, Hilary P. - Coyle
Traylor, Jesse D. - Coyle
Tryon, Agnes M. - Stillwater
Venable, Zella M. - Yale
Walters, Minnie B. - Stillwater
Walters, Maggie P. - Stillwater
Watrous, Mary E. - Ponca City
Watrous, Robert O. - Ponca City
Watrous, George H. - Ponca City
Weiss, Stanley E. - Oklahoma City
Will, Doris G. - Glencoe
Williams, George R. - Ingalls
Willbanks, Cran H. - Ralston
Witteman, Ada P. - Marena
Woodson, Tip. D. - Britton
Woolard, Ira I. - Enid
Woolard, William F. - Enid

School of Agriculture and Domestic Economy

Ames, Clara E. - Ralston
Anderson, Jesse G. - Union City
Atkinson, Lester C. - Fairmount

Bahr, William H.	Driftwood
Bain, Landy L.	Grimes
Bell, Melvin L.	Carnegie
Blanton, William T.	El Reno
Breckenridge, Henry J.	Kremlin
Carter, Jay W.	Stillwater
Chriswell, Louis	Oklahoma City
Cleverdon, N. Fred	Kansas City, Mo.
Copeland, Earl P.	Estelle
Couch, Frank	Oklahoma City
Crawford, Wallie H.	Stillwater
Crume, Nancy	Stillwater
Dixon, George D.	Union City
Dixon, Oliver T.	Orlando
Duncan, Harley H.	Enid
Durham, William G.	Stillwater
Durham, May	Stillwater
Eagles, Azalia	Yale
Emerson, W. Fred	Enid
Emerson, Harry L.	Enid
Erickson, Lillie N.	Stillwater
Evans, Lee O.	Verden
Feary, J. Grover	Guthrie
Ferguson, Pearl V.	Yale
Fisher, Joseph	Sayre
Foreman, Agnes A.	Kingfisher
Gard, Harry O.	Clarion
German, David	Stillwater
German, William	Glencoe
Gray, William F.	May
Hamon, Robert J.	Stillwater
Hart, Dee E.	Shawnee
Hastings, Alice A.	Stillwater
Heckendorn, Harry E.	Pawnee
Heizer, M. Cora	Stillwater
Hendricks, E. Haynes	Grady, Ind. T.
Herbert, Paul	Cleveland
Hesser, George W.	Stillwater
Hewitt, John R.	Coyle
Hobbs, Earl F.	Estelle
Ingham, Maude M.	Glencoe
Jarrell, Robert S.	Stillwater
Johnson, Omar W.	Pawnee
Johnson, Ralph M.	Stillwater
Jones, Carrie F.	Stillwater
Jordan, John P.	Oklahoma City
King, Leslie G.	Cooperton
Kirby, Lotella	Stillwater
Lewis, Lloyd W.	Stillwater
Maul, George E.	Stillwater
McMindes, Willis P.	Pond Creek
McPheeters, Archie A.	Stillwater
Meredith, Clarence S.	Stillwater
Millhollen, Edna D.	Stillwater
Mitchell, Ethel M.	Stillwater
Mitchell, Lula	Stillwater

Morse, Fred J. - Ravia, Ind. T.
Noble, Anna - Stillwater
Orndorff, Calvin P. Russett, Ind. T.
Oursler, Elizabeth M. Stillwater
Owens, Ross W. - Tulsa, Ind. T.
Painter, Henry R. Fairmount
Painter, Samuel - Fairmount
Patton, Clara E. Stillwater
Peterman, A. Carl Sinnett
Pickerill, Ura P. Ripley
Potter, Ida L. Perkins
Potter, Nora E. Perkins
Powell, Luther Lexington
Richardson, Fred A. Stillwater
Rising, Grace M. Glencoe
Ritter, Edith L. Stillwater
Roberson, Howard D. Stillwater
Smith, J. Stayton Mulhall
Spitler, Chester J. Yukon
Stiles, Florence A. Sulphur Springs, Ind. T.
Stong, George E. Granton
Straka, Mary Stillwater
Sweeney, Dennis Enid
Swigert, Roy Cement
Tillion, Byrd Stillwater
Tillion, Rolla Stillwater
Vanderpool, Lucile S. Stillwater
Venable, Lila R. Yale
Waddell, Harry S. Tulsa, Ind. T.
Waddell, Otto R. Tulsa, Ind. T.
Walker, Peter J. Omega
Walsworth, Charles W. Enid
Weaver, Leon J. McComb
White, Rupert R. Valley
Whitney, William C. Neal
Willbanks, Clara Ralston
Wilson, Loran Garber
Wolfe, Julia E. Marena
Woodard, William W. Afton, Ind. T.
Woods, Pearl M. Stillwater
Worley, Adele C. Stillwater
Yost, Harvey A. Whiterock
Yost, William M. Whiterock

Business Course

Allnutt, Maggie W. Stillwater
Babcock, Elsie E. Perkins
Burdick, Lula Stillwater
Caton, Orpha N. Stillwater
Chamness, Hugh A. Stillwater
Coate, Hugh L. Ponca City
Coverdale, Talmage E. Stillwater
Cunningham, Mildred Ingalls
Demorest, Mabel Stillwater
Emerson, Chas. J. Lucien
Ferguson, Nereus A. Cordell
Hanner, Lena Stillwater

Hinson, John H. - Marshall
Humphrey, Floyd - Oroville, Mont.
Inman, Golda B. - Stillwater
Inman, K. Pearl - Stillwater
Kerckman, Frankie - Stillwater
Knowles, Maud P. - Stillwater
League, Drusie - Stillwater
Maranville. Evan J. - Cleveland
Maroney, Jessie L. - Stillwater
Martin, Edna E. - Lucien
McCoy, Frank A. - Stillwater
Mullendore, Carl - Cleveland
McTaggart, Winnifred M. - Stillwater
Owens, Thomas B. - Tulsa, Ind. T.
Pappe, Richard - Kingfisher
Pickering, Jennie F. - Stillwater
Rogers, Cora L. - Cleveland
Ross, Paul L. - Stillwater
Salzenstein, Mamie - Athens, Ill.
Smith, Earl W. - Cleo
Steen, Clem E. - Stillwater
Talbot, George L. - Stillwater
Triplet, Grover G. - Stillwater
Turney, Florence M. - Hunter
Woodruff, Lily A. - Stillwater
Youst, John B. - Stillwater
Zachary, Carl - Cement

Special Students

Anderson, R. Stanley - Woodward
Anderson, Stephen N. - Stillwater
Badraun, Meda A. - Stillwater
Baird, Roddle C. - Lincoln Center, Kans.
Binkley, Katherine M. - Canton, Ohio
Bishop, Bertha I. - Jennings
Botts, Margaret N. - Ingalls
Boster, Marion - Jefferson
Buxton, Frank C. - Cherokee
Carson, Annie H. - Stillwater
Corbett, Ray A. - Chickasha, Ind. T.
Coyle, John W. - Guthrie
Dalton, Clarence G. - Broken Arrow, Ind. T.
Diggs, Blanche Wise - Stillwater
Dolde, Emma Swope - Stillwater
Dorey, Lewis H. - Homestead
Dorman, Harry Y. - Blackwell
Evans, Thomas N. - Stroud
Fields, Carol E. - Stillwater
German, Thomas R. - Glencoe
Gray, Pearl Patterson - Stillwater
Hamon, Benjamin F. - Stillwater
Harrison, Luella - Stillwater
Hastings, James K. - Stillwater
Herbert, Mary B. - Cleveland
Herrick, Walter G. - Guthrie
Hurst, Charity T. - Stillwater
Kenworthy, Lottie M. - Stillwater

Kerr, Hope	Stillwater
Kester, Albert M.	Enid
Kirkpatrick. V. Victoria	Stillwater
Knight, Ernest E.	Stillwater
Lewis, Carrie E.	Stillwater
Lytton, Clyde F.	Stillwater
McCoy, Wilburn G.	Guthrie
McNeal, Paul A.	Guthrie
Means, Pliny E.	McLoud
Morgan, Hiram	Stillwater
Morrow, Jessie E.	Stillwater
Newcomb, Bonnie E.	Stillwater
North, Flo	Tulsa, Ind. T.
Oschman, Hattie I.	Stillwater
Reed, Mary	Stillwater
Rickard, Etta	Stillwater
Riley, Stella Boyd	Stillwater
Sater, Datus E.	Stillwater
Simmons, William R. R.	Stillwater
Smith, Karl L.	Stillwater
Springer, Lee Van	Sparks
Stanley, Ruby E.	Agra
Swinford, Geneva	Stillwater
Tankersley, M. Lola	Stillwater
Thomas, Albert L.	Jacksonville, Ills.
Thompson, Bessie	Stillwater
Van Buskirk, Elbert	Ralston
Varney, S. J.	La Salle, Colo.
Wells, Archie S.	Stillwater
Williams, George R.	Ingalls
Williams, Stuart L.	Cisco, Tex.
Winsworth, Merton L.	Dermot, Kans.
Wright, Lizzie J.	Fowler, Kans.

Short Course Students in Agricalture and Mechanic Arts

Bell, Zue A.	Arnett
Blancett, Rolla G.	Stillwater
Broetz, William L.	Deer Creek
Bullock, Frank M.	Canute
Calkins, Wayne F.	Stillwater
Campbell, Roy B.	Wellston
Cooper, Joseph E.	Seward
Duncan, Harlie H.	Enid
English, Row W.	Renfrow
Gard, Harry O.	Clarion
Fry, Max	Braman
Gould, Robert L.	Kingfisher
Hart, Charles C.	Shawnee
Hengel, George B.	Stillwater
Hogan, Wirt W.	Chandler
Honegger, Robert	Kingfisher
Hutchison, Ross Y.	Moore
Irwin, Arthur C.	Tulsa, Ind. T.
Kessler, Albert E.	Perkins
Lower, Raymond L.	Chandler
Lynch, Herold W.	Hennessey
Martin, Edgar	Stillwater

Miller, Frank I.	Enid
McCoy, Vernon O.	Sturm
Musselman, Mahlon M.	Medford
Painter, Samuel	Fairmount
Potter, Vernie G.	Harper, Kans.
Quiring John C.	Korn
Rapp, Arthur J.	Guthrie
Spindler, Curtis R.	Yukon
Springer, John W.	Sparks
Stong, George E.	Granton
Stucker, Fred C.	Stillwater
Tillion, Byrd	Shawnee
Tillion, Rolla	Shawnee
Tillion, Charles	Shawnee
Vasey, C. Roscoe	Calumet
White, Rupert R.	Valley
Wiar, Royal B.	Stillwater
Yager, Frank	Luther
Yager, Charles L.	Luther
Young, Roy K.	Woukomis

Short Course Students in Stock-Judging and Seed Selection

Adams, Oscar	Stillwater
Adams, S. C.	Antelope, Kans.
Adams, W. A.	Stillwater
Adams, W. C.	Shawnee
Ahrberg, A. W.	Stillwater
Aikins, D. L.	Medford
Albright, F. M.	Perkins
Albright, V. H.	Perkins
Alderson, J. A.	Pond Creek
Alkire, E. E.	Lexington
Alkire, George E.	Lexington
Allison, J. W.	Stillwater
Allnutt, H. B.	Stillwater
Altringer, A.	Lone Wolf
Anderson, Allen	Stillwater
Anderson, R. A.	Stillwater
Anderson, W. W.	Carney
Andrews, Harry	Stillwater
Armstrong, D. W.	Omega
Arnold, B.	Stillwater
Ashmore, J. A.	Cushing
Ayersman, J. H.	Medford
Baird, William	Medford
Baker, Charles	Stillwater
Baker, C. D.	Kingfisher
Baker, G. G.	Britton
Barnes, J. R.	Perry
Bartholomew, W. J.	Stillwater
Bate, C.	Stillwater
Bate, G. R.	Stillwater
Beach, R. E.	Orlando
Bechtel, Otto	Glencoe
Belk, P.	Stillwater
Bell, J. M.	Mulhall
Bigler, Frank	Stillwater

Bigley, J.	Stillwater
Bigley, W. N.	Perry
Bilyeu, J.	Stillwater
Bilyeu, J. E.	Stillwater
Blagden, Jos.	Kildare
Blake, Claude E.	Bixby, Ind. T.
Boaz, E. C.	Stillwater
Bohn, R. G.	Stillwater
Boss, Grant	Stillwater
Bostwick, William	Glencoe
Boulware, G. W.	Yale
Bowman, J. L.	Perkins
Boyce, E. S.	Carmen
Boyd, F. W.	Yukon
Bracht, E.	Oklahoma City
Bradwell, W. C.	Mulhall
Brandt, G.	Stillwater
Bras, C. E.	Stillwater
Bras, O. D.	Stillwater
Brice, William	Perkins
Briggs, Jeff. L.	Stillwater
Brittain, M. L.	Norman
Brock, H. C.	Stillwater
Broetz, W. M.	Deer Creek
Buchanan, F. E.	Glencoe
Burket, J. L.	Stillwater
Burtis, Walter J.	Fredonia, Kans.
Butterton, Mark	Yukon
Calkins, L. H.	Stillwater
Canfield, H. C.	Blackburn
Cantaton, Adam	Glencoe
Carpenter, E. W.	Stillwater
Carson, Robert	Frederick
Carter, Thos.	Glencoe
Cawood, W. W.	Sapulpa, Ind. T.
Chandler, C. S.	Stillwater
Chantry, Warren	Perkins
Clark, D. M.	Stillwater
Clark, Tom	Stillwater
Clausen, J.	Stillwater
Cleveland, G. C.	Stillwater
Cochran, Robert	Ponca City
Cohee, V. D.	Coyle
Collett, G. W.	Oklahoma City
Cole, John	Stillwater
Confrey, V.	Mehan
Copple, P. J.	Waukomis
Correll, O. E.	Newkirk
Coss, J. P.	Perkins
Cox, J. H.	Coyle
Crawford, J. W.	Stillwater
Crocker, C. M.	Guthrie
Cross, E. E.	Stillwater
Daniels, Allen	Morrison
Dean, Calvin	Newkirk
Dean, M. H.	Ingalls

De Gann, J. D.	Marshall
Dent, George	Stillwater
Donnell, H. W.	Stillwater
Dotter, Gus. H.	Stillwater
Doty, S. H.	Stillwater
Dougan, A. C.	Kildare
Dryden, J. T.	Stillwater
Duck, C. B.	Stillwater
Duck, E. W.	Stillwater
Duncan, H. H.	Enid
Durham, A. J.	Stillwater
Eagle, L. A.	Yale
Easton, N. B.	Stillwater
Edmister, C. W.	Cantonment
Edwards, Anthony	Waukomis
English, W. W.	Enid
Essex, Omer	Stillwater
Etheridge, A. A.	Stillwater
Etheridge, M.	Stillwater
Eyler, W. O.	Morrison
Fairchild, M.	Stillwater
Faubion, L. A.	Enid
Fentiman G. D.	Stillwater
Ferguson, George	Glencoe
Ferguson, W. A.	Yale
Fleming, Harry	Stillwater
Flesner, G.	Stillwater
Fletcher, J. M.	Stillwater
Fortner, J. W.	Stillwater
Fortner, L. P.	Stillwater
French, C. C.	Ft. Worth, Texas
Fry, Max	Hunnewell, Kans.
Gaasch, P.	Stillwater
Gilbert, A. S.	Ponca City
Gilges, L.	Stillwater
Gilliland, H. C.	Hart, Ind. T.
Gilliland, J. R.	Hart, Ind. T.
Goode, S. R.	Mangum
Gossett, L. G.	Waukomis
Gray, J. M.	Mountain View
Gray, Tom	Rossville
Gwin, H. A.	Stillwater
Gwinn, W. S.	Wellston
Hahn, R. H.	Alva
Hainey, J. W.	Pawnee
Hall, F. W.	Lone Wolf
Ham, Mac	Stillwater
Hamilton, Hays	Stillwater
Hamilton, J. M.	Avery
Hamlin, E. M.	Stillwater
Hamon, W. S.	Stillwater
Hand, H. M.	Stillwater
Harlan, B.	Shawnee
Harriman, R. L.	Bunceton, Mo.
Hardy, J. W.	Stillwater
Hastings, F. O.	Glencoe
Haunstein, Fred	Waukomis

Hawkins, J. A.	Bunceton, Mo.
Hawley, D. L.	Guthrie
Heckendorn, J. W.	Pawnee
Henthorn, A. J.	Oklahoma City
Herbert, E. A.	Mulhall
Herbert, H. L.	Mulhall
Hiatt, W. L.	Oklahoma City
Hibbard, G. W.	Cushing
Hill, Mrs. S. W.	Lucien
Hill, Wilford	Lucien
Hillerman, John	Stillwater
Hillerman, Bert	Stillwater
Hinkle, W. H.	Glencoe
Hodges, R. G.	Glencoe
Hogan, W. H.	Chandler
Hoke, J. P.	Quay
Holler, A. C.	Maramec
Holzer, Chris.	Stillwater
Hoskin, J.	Newkirk
Hoskinson, C. S.	Stillwater
Howe, A. M.	Orlando
Howard, W.	Glencoe
Hunter, L.	Guthrie
Ide, B. E.	Oklahoma City
Ingham, H. E.	Dillon
Ingham, J. W.	Glencoe
Inman, J. L.	Stillwater
Jacob, John	Stillwater
James, M.	Stillwater
Jamison, N. A.	Stillwater
Johnson, H. T.	Pawnee
Johnson, J. R.	Lexington
Johnson, J. J.	Covington
Jones, C. R.	Stillwater
Jones, V. V.	Shawnee
Jones, William	Medford
Jones, W. H.	Mustang
Jordan, F. M.	Oklahoma City
Jordan, T. A.	Ponca City
Judge, W. H.	Perkins
Keeler, L.	Yale
Kenefick, J. S.	Glencoe
Kennedy, Jas. A.	Stillwater
Kenworthy, A.	Stillwater
Kenyon, N. C.	Ponca City
Kerr, G. W.	Stillwater
Kester, E. H.	Enid
Kimple, A.	Stillwater
Kirk, F. S.	Enid
Kirkpatrick, R. W.	Stillwater
Kleeman, Herman	El Reno
Kleiner, R.	Wheatland
Knauss, A. E.	Stillwater
Knauss, David	Stillwater
Knight, G. W.	Coyle
Knight, W. D.	Coyle

Knipe, W. A. - Perkins
Knox, William - Glencoe
Kreger, A. - Okarche
Kroeger, F. D. - Guthrie
La Byer, L. D. - Stillwater
La Byer, W. L. - Stillwater
Lane, C. G. - Guthrie
Langan, P. - Ingalls
Larrison, J. H. - Morrison
Laughlin, S. A. - Stillwater
Lawson, G. W. - Maramec
Leach, Garfield - Norman
Leete, A. B. - Yale
Leforce, L. F. - Garber
Leniger, P. - Stillwater
Lewis, G. H. - Chickasha, Ind. T.
Lewis, W. L. - Stillwater
Lindsay, J. A. - Kingfisher
Long, W. D. - Glencoe
Longe, Hy - Stillwater
Longfellow, T. J. - Stillwater
Lower, R. L. - Chandler
Lowery, T. T. - Perkins
Loy, F. U. - Hitchcock
Lyons, Jos. - El Reno
Lyons, M. H. - Ft. Reno
Maroney, G. H. - Stillwater
Maroney, William - Stillwater
Marlow, F. M. - Blackburn
Martin, J. E. - Stillwater
Martin, L. - Ingalls
Masheter, A. H. - Sabetha, Kans.
Masheter, J. A. - Stillwater
Masheter, W. B. - Stillwater
Mathis, A. L. - Newkirk
Matthews, L. - Stillwater
Mayginnes. N. W. - Tulsa, Ind. T.
Meiberger, Jos. - Enid
Miller, F. I. - Enid
Mills, George - Yale
Mitchell, J. T. - Stillwater
Moore, Theo - Arkansas City, Kans.
Moore, W. G. - Oklahoma City
Morgan, T. H. - Stillwater
Morris, A. L. - Stillwater
Morris, John - Enid
Morris, J. C. - Stillwater
Munnell, H. L. - Basque
Muret, L. G. - Blackwell
Murphy, J. B. - Stillwater
Musselman, J. E. - Medford
Musselman, M. L. - Medford
McAnulty, John - **Marena**
McClellan, J. T. - Ponca City
McCulley, Frank - Kingfisher
McCurry, W. A. - Morrison

McDonald, T. M. - - - - - Stillwater
McGee, J. M. - - - - - - Glencoe
McHenry, Ed - - - - - Stillwater
McIntyre, T. D. - - - - - Pawnee
McKee, H. C. - - - - - Stillwater
McMeekin, John - - - - - Marshall
McMeekin, J. A. - - - - - Marshall
McMillian, J. C. - - - - - Perkins
McNabb, C. A. - - - - Oklahoma City
McNabb, J. R. - - - - - Lone Wolf
Neal, W. A. - - - - Clarksville, Iowa
Negley, Henry - - - - - - Coyle
Nelson, J. H. - - - - - - Perry
Newberry, H. J. - - - - - Lone Wolf
Newberry, H. M. - - - - - Shrewder
Nihill, T. - - - - - Cushing
Nininger, J. A. - - - - - - Coyle
Nininger, J. B. - - - - - - Coyle
Noble, G. L. - - - - - - Stillwater
Northup, F. D. - - - - - Oklahoma City
O'Neill, John - - - - - - Marshall
Page, C. C. - - - - - Carney
Painter, Ray - - - - - - Stillwater
Painter, Sam - - - - - Fairmount
Painter, G. W. - - - - - - Stillwater
Parham, L. W. - - - - Bedford, Ind. T.
Parker, John - - - - - - Cushing
Parker, Richard - - - - - Waukomis
Paris, T. H. - - - - - - Renfrow
Paullin, D. C. - - - - - Newkirk
Petre, J. G. - - - - - - Okarche
Peter, R. D. - - - - Arkansas City, Kans.
Phelps, Wm. Howard - - - - - Autwine
Phelps, W. M. - - - - - - Pawnee
Phillips, G. W. - - - - - - Stillwater
Phillips, W. I. - - - - - Lamont
Potter, O. E. - - - - - - Stillwater
Potter, V. G. - - - - - - Stillwater
Pound, L. B. - - - - - - Stillwater
Puckett, C. - - - - Del Norte, Alta, Canada
Quint, C. W. - - - - - - Wellston
Rader, G. H. - - - - - - Stillwater
Rains, John - - - - - - Ripley
Ramsey, J. W. - - - - - Oklahoma City
Rarigh, J. G. - - - - - - Watonga
Rarigh, Mrs. J. G. - - - - - - Watonga
Redden, L. S. - - - - - Gypsum, Kans.
Reed, J. W. - - - - - - Eddy
Reed, J. W., Jr. - - - - - - Eddy
Robb, W. B. - - - - - - Cushing
Roberts, A. O. - - - - - - Stillwater
Roberts, A. W. - - - - - Ponca City
Roesler, Emanuel - - - - Claflin, Kans.
Ropp, Arthur - - - - - Guthrie
Rosier, P. H. - - - - - - Perry
Ross, Charles - - - - - - Enid

Round, Robert	Waukomis
Rule, C. A.	Manford
Rule, Geo.	Orlando
Ryther, J. A.	Stillwater
Sayre, E. W.	Morrison
Sayre, W. A.	Morrison
Sharp, P. R.	Stillwater
Shreves, F.	Glencoe
Skinner, T. M.	Oklahoma City
Smith, Charles	Autwine
Smith, C. T.	Mulhall
Smith, H. F.	Meridian
Smith, R. M.	Glencoe
Smith, T. E.	Norman
Sousley, J. T.	Pawnee
Sousley, W. M.	Pawnee
Spalding, John A.	North Enid
Speakman, F. A.	Morrison
Spore, S.	Kildare
St. Clair, J. B.	Stillwater
Standley, S. N.	Perkins
Stebbins, B. T.	North Enid
Stine, J. A.	Stillwater
Stockton, T. H.	Perkins
Stoddard, J. F.	Burden, Kans.
Stone, C. H.	Stillwater
Stovall, G. W.	Stillwater
Stover, L. D.	Yale
Straub, David	Stillwater
Taggart, W.	Waukomis
Taggart, W. H.	Waukomis
Tansey, A. C.	Pawnee
Tapp, P. W.	Stillwater
Tate, J. B.	Perry
Taylor, T. G.	Stillwater
Thomas, Howard	Tonkawa
Thomas, N. E.	Tonkawa
Thompson, J. N.	Morrison
Tillion, Frank	Shawnee
Townsend, B. F.	Stillwater
Truesdale, A. A.	Maramec
Van De Mark, F. W.	Mehan
Vanderpool, W. F.	Stillwater
Van Grundy, C. W.	Calumet
Vanhoen, H. B.	Stillwater
Van Zandt, W. P.	Mehan
Vaughn, E. L.	Leedy
Vaughn, R. S.	Leedy
Volmer, S. P.	Stillwater
Wade, B. M.	Chilocco
Wadley, J. C.	Stillwater
Walker, C. C.	Glencoe
Walker, S. R.	Stillwater
Wallis, J. H.	Morrison
Walters, Roy	Fairmont
Watson, W. A.	Stillwater

Watson, W. D.	Stillwater
Welker, John	Skeedee
Wells, Thomas	Stillwater
West, J. E.	Stillwater
West, S. M.	Stillwater
White, Ewers	McLoud
White, Harry	Stillwater
White, John A.	Chandler
Wiar, Henry	Stillwater
Williams, R. W.	Oklahoma City
Williams, J. J.	Carney
Williver, J.	Stillwater
Withers, A. G.	Stillwater
Withers, I. M.	Glencoe
Withers, W. C.	Glencoe
Wolf, F. A.	Coyle
Woodworth, Charles G.	Watonga
Woodworth, J. E.	Guthrie
Woodworth, M. C.	Perry
Work, L. J.	Carmen
Wood, S. C.	Stillwater
Wright, L. W.	Morrison
Yeargin, J. C.	Stillwater
Yeargin, R. R.	Glencoe
Younger, J. E.	Morrison
Total	***906***
Exclusive of Short Course Students in Stock-judging and Seed Selection	***509***

Alumni

1896

Arthur W. Adams, Cashier, Hugo National Bank — Hugo, Ind. T.
J. Homer Adams, Principal of High School — Beloit, Kans.
Frank E. Duck, Farmer — Stillwater, Okla.
A. Edward Jarrell, Santa Fe System — Pueblo, Colo.
Erwin G. Lewis, Cashier, Ramona State Bank — Ramona, Ind. T.
Oscar M. Morris, Professor of Horticulture, A. and M. College — Stillwater, Okla.

1897

George W. Bowers, Railway Conductor — Enid, Okla.
Andrew N. Caudell, Entomologist, Department of Agriculture — Washington, D. C.
Jessie O. (Thatcher) Bost, At Home — Stillwater, Okla.

1898

John T. Clark, Treasurer of Mindanao Province, — Cagayon, Philippine Islands
Augustus G. Ford, Chemist Experiment Station and Instructor in Agricultural Chemistry, A. and M. College — Stillwater, Okla.
Norris T. Gilbert, Cashier, First National Bank of Madill, President of the Oklahoma and Indian Territory Bankers' Association — Madill, Ind. T.
Thomas J. Hartman, Cashier, Bank of Deer Creek — Deer Creek, Okla.
Clinton Morris, Superintendent of Iron Works — Chicago, Ill.
Emma H. (Swope) Dolde, Special Student in Domestic Economy, A. and M. College, — Stillwater, Okla.
Blanche (Wise) Diggs, Special Stndent in Domestic Economy, A. and M. College, — Stillwater, Okla.

1899

Noah P. Bullock, Merchant — Fairview, Okla.
Clarence R. Donart, Cashier, Bank of Ripley — Ripley, Okla.
Minnie A. (Dysart) Teter, At Home — Pawnee, Okla.
Francis M. Greiner, Chemist, Iron Works — Ensley, Ala.
Cora A. Miltimore, Librarian, A. and M. College — Stillwater, Okla.
S. Earl Myers, Bookkeeper — Shawnee, Okla.
Arthur B. McReynolds, Publisher and Editor — Guadalupe, Calif.
Charles E. Regnier, Cashier, Okmulgee National Bank — Okmulgee, Ind. T.

1900

Arthur W. Anderson, Lawyer — Woodward, Okla.
Cora M. (Donart) Coffey, At Home — Lawton, Okla.
Thomas T. Goff, Instructor in Gem City Business College — Quincy, Ill.
John S. Malone, Assistant in Animal Husbandry, A. and M. College — Stillwater, Okla.
Louis C. Miller, Chief Division Forest Planting — Washington, D. C.
Geo. W. Stiles, (M. D., George Washington University) Bureau of Chemistry, Department of Agriculture — Washington, D. C.

1901

R. Bradford Hurst, Recruiting Officer, U. S. Navy — Denver, Colo.
Kate A. Jewett, Teacher in City Schools — Perkins, Okla.
Charles L. Kezer, Professor of Latin, Central Normal School — Edmond, Okla.
Arthur C. Lewis, Assistant State Entomologist — Atlanta, Ga.
Velma Walker, At Home — Stillwater, Okla.

1902

A. Bondy Anderson, Motive Power Department, Santa Fe Railway System - - - - Topeka, Kans.
Sarah S. Carson, County Superintendent - - Stillwater, Okla.
A. Warren Flower, Railway Service - - Deer Creek, Mont.
A. Gertrude Hunt, At Home - - - Guthrie, Okla.
George M. Janeway, Cashier, Bank of Skiatook Skiatook, Ind. T.
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1903

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1904

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William A. Tarr - - - - - Tucson, Ariz.
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1905

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Frank R. Blue, Bullock Electric Co. - - Cincinnati, Ohio.
Rose E. Broom, Teacher - - - Perkins, Okla.
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Alice A. Hastings, Teacher - - Stillwater, Okla.
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Elmer J. Knauss, Drug Clerk, - - Omaha, Neb.
John A. Nelson, Druggist - - - Washington, D. C.
Carrie E. Lewis, Teacher - - - Stillwater, Okla,
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J. Earl Woodworth, Statistical Clerk, Territorial Board of Agriculture - - - Guthrie, Okla.

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Erratum

On page 6 the name of F. A. McCoy should appear as Physical Director.

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